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REVISIONS		

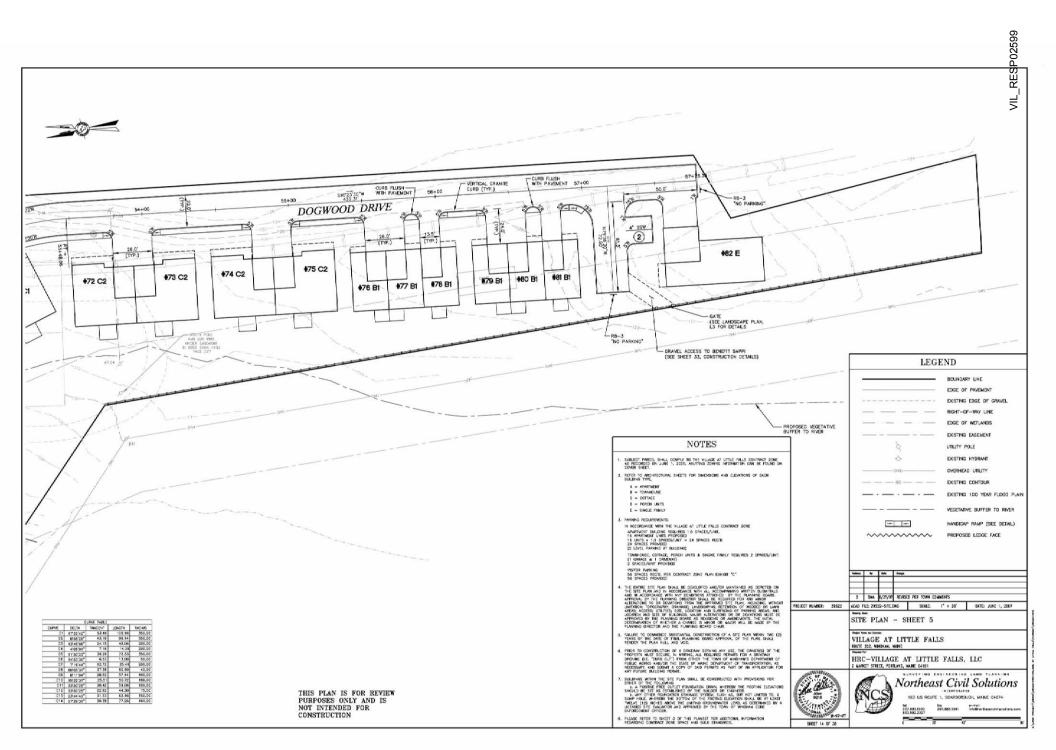
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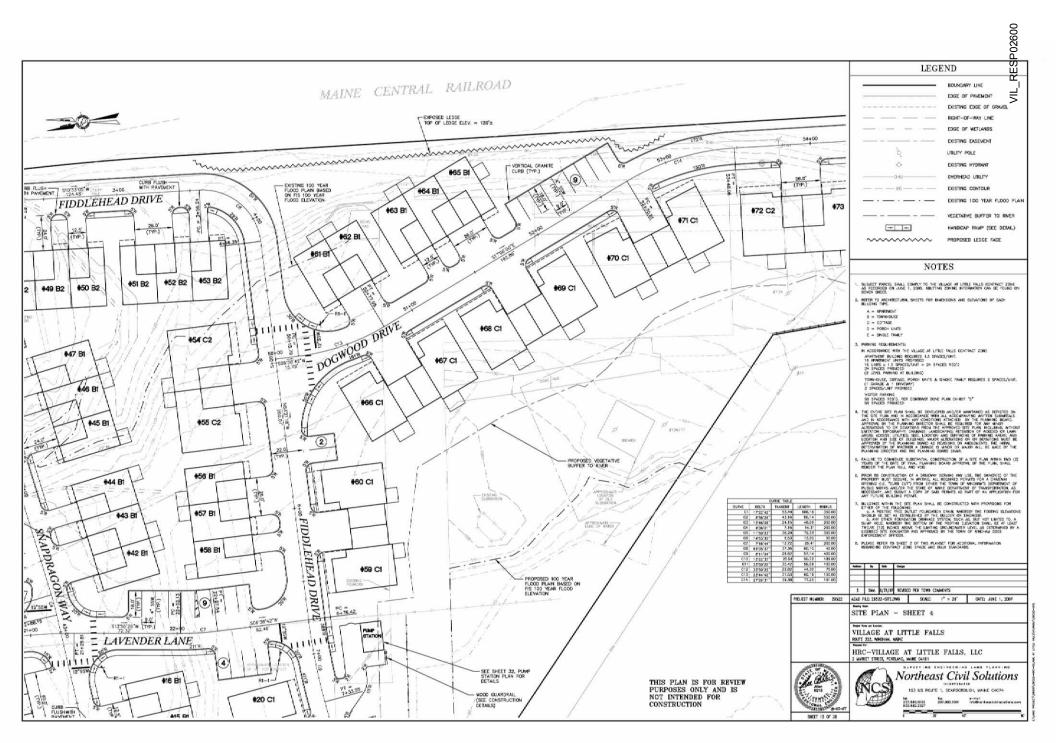
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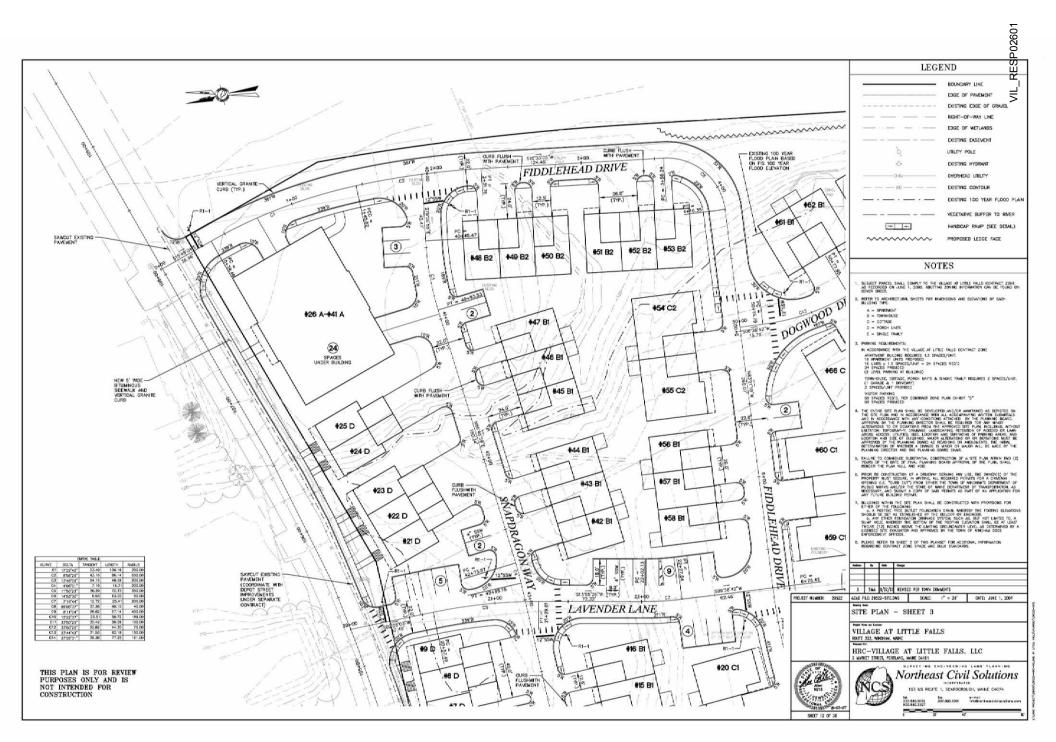
TOWNHOUSE-TYPE 2 SECOND FLOOR PLAN

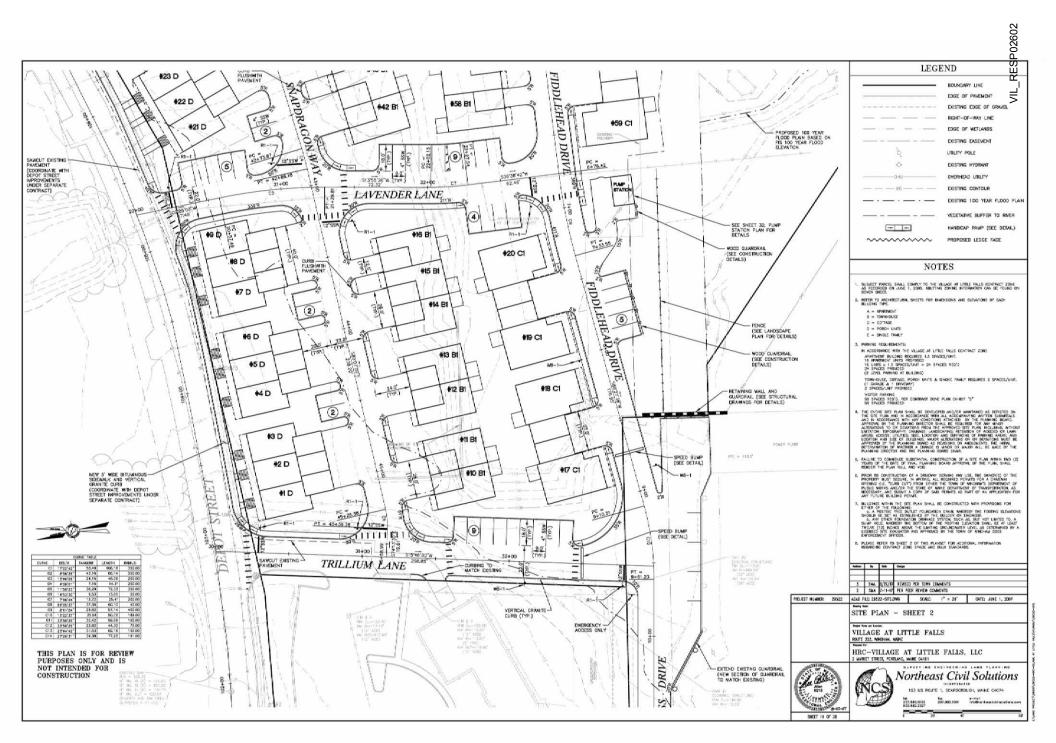
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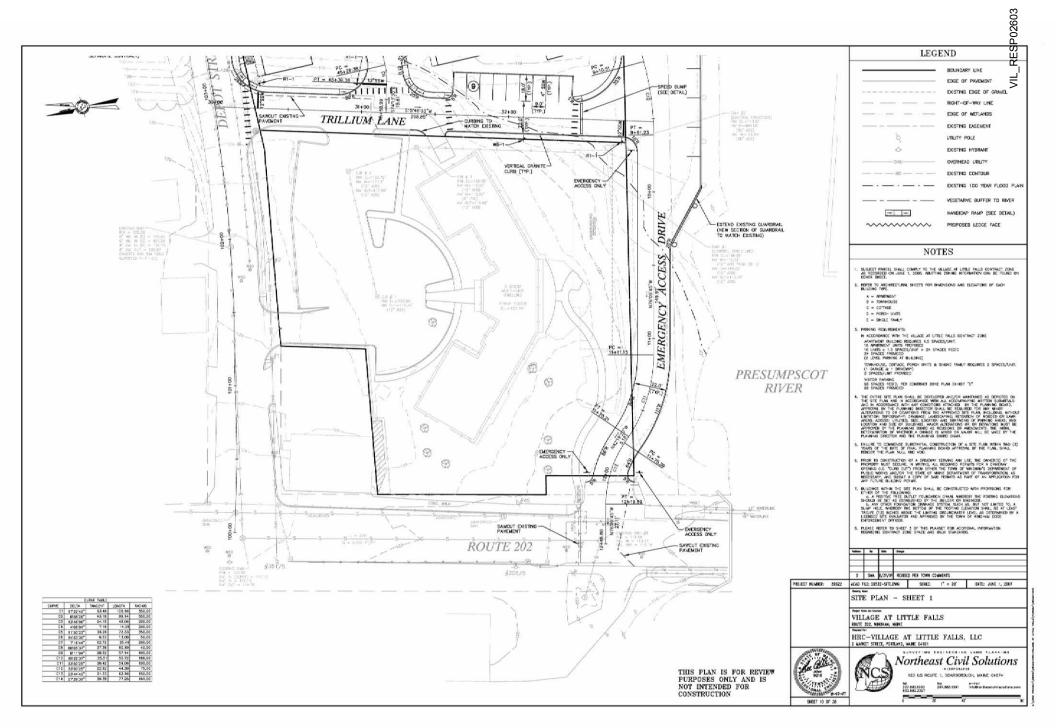
TOWNHOUSE 2 - SECOND FLOOR PLAN

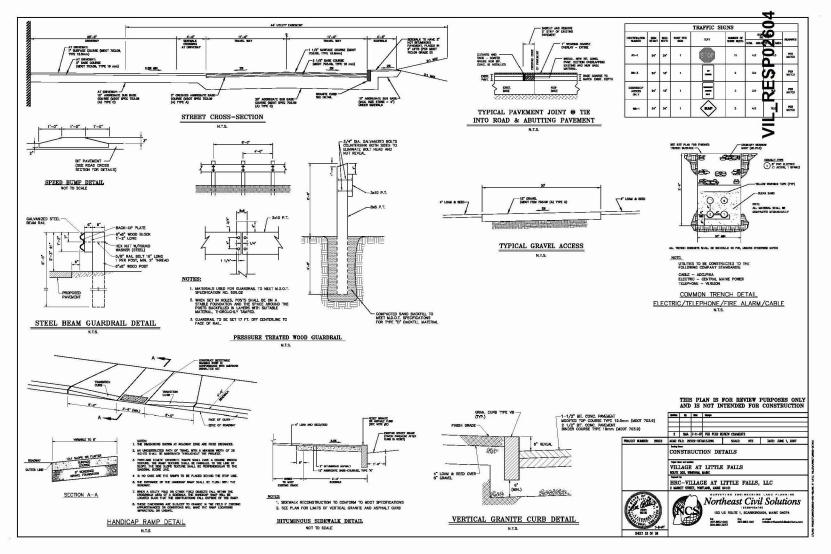


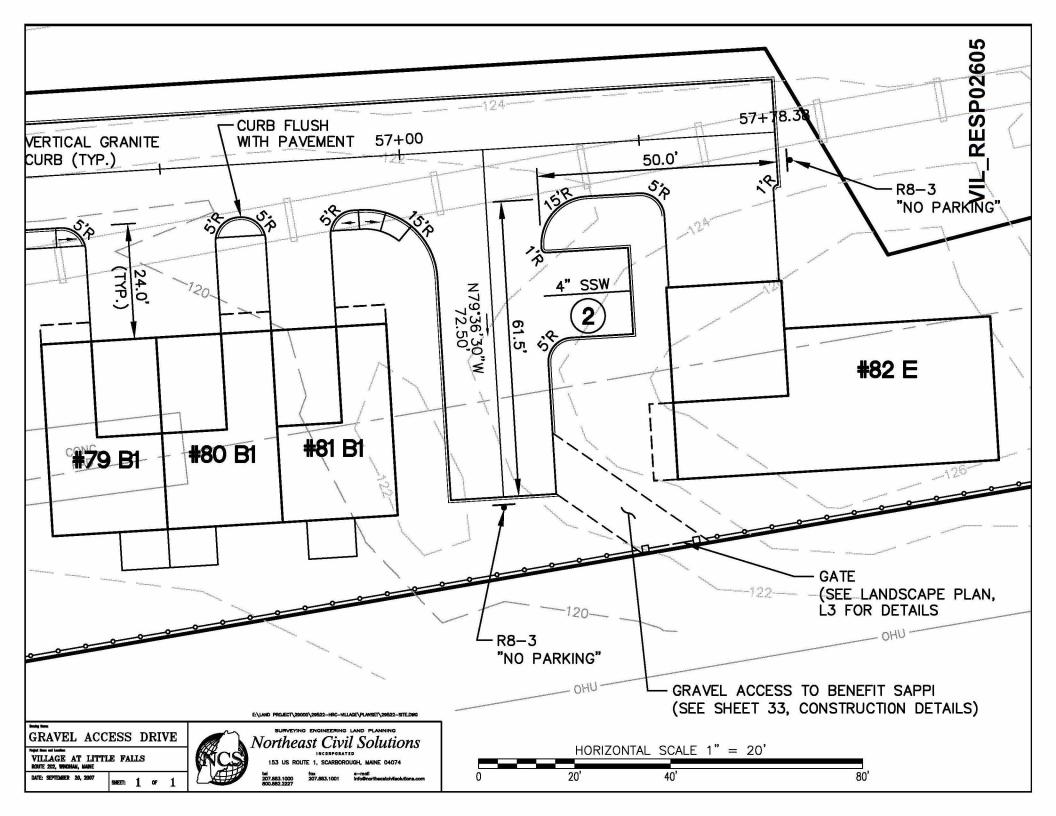


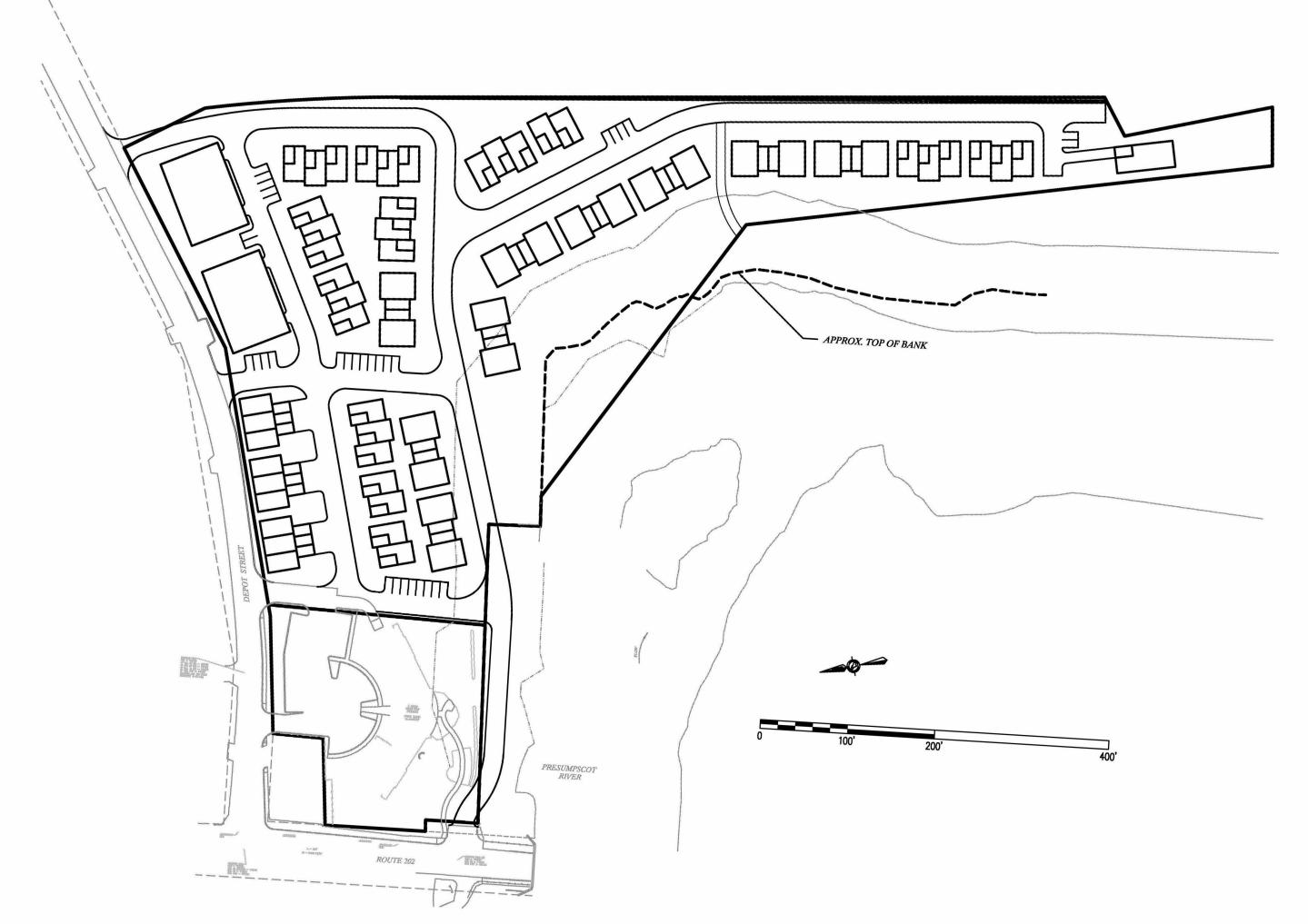


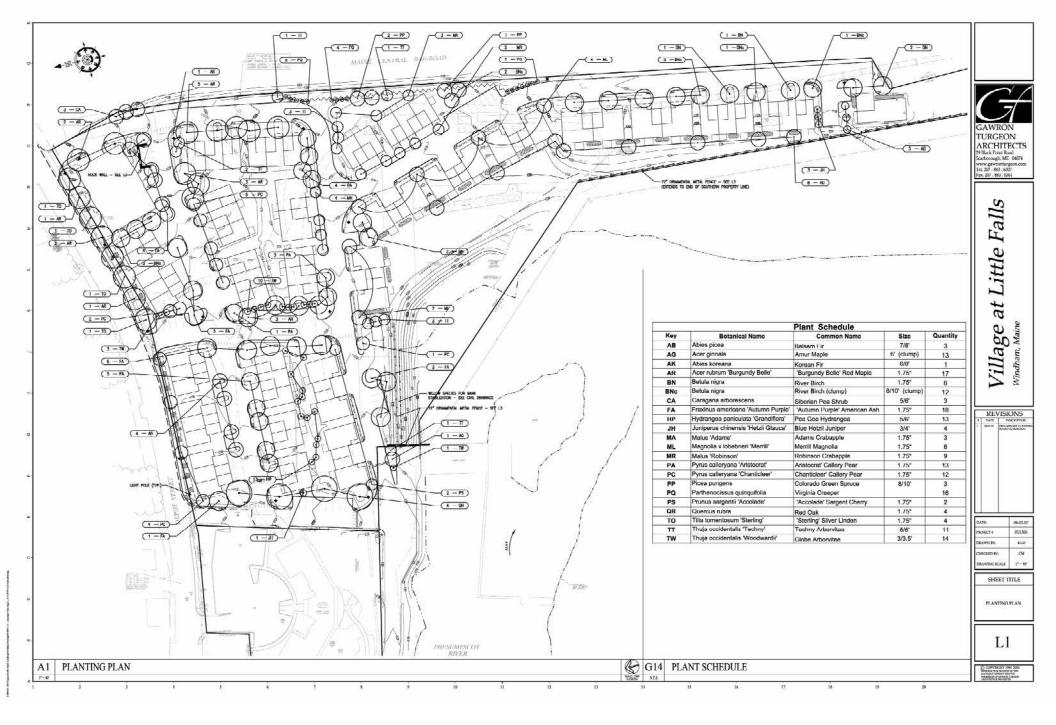


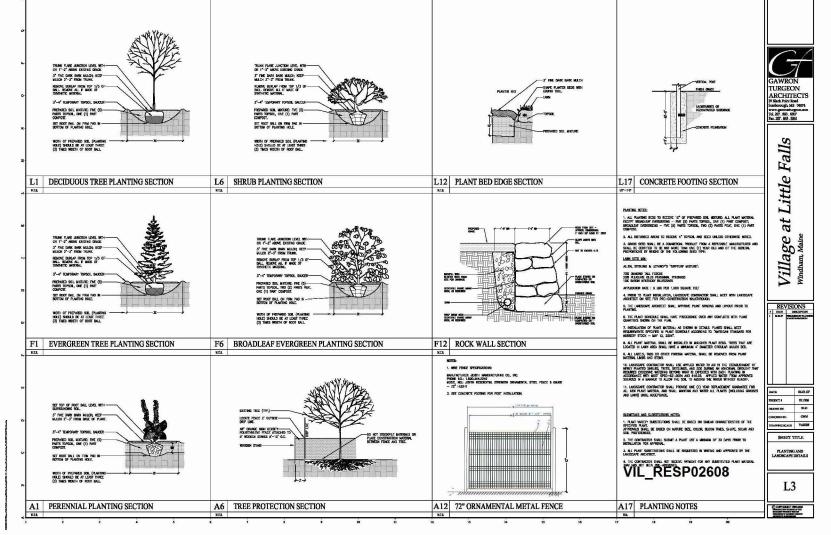


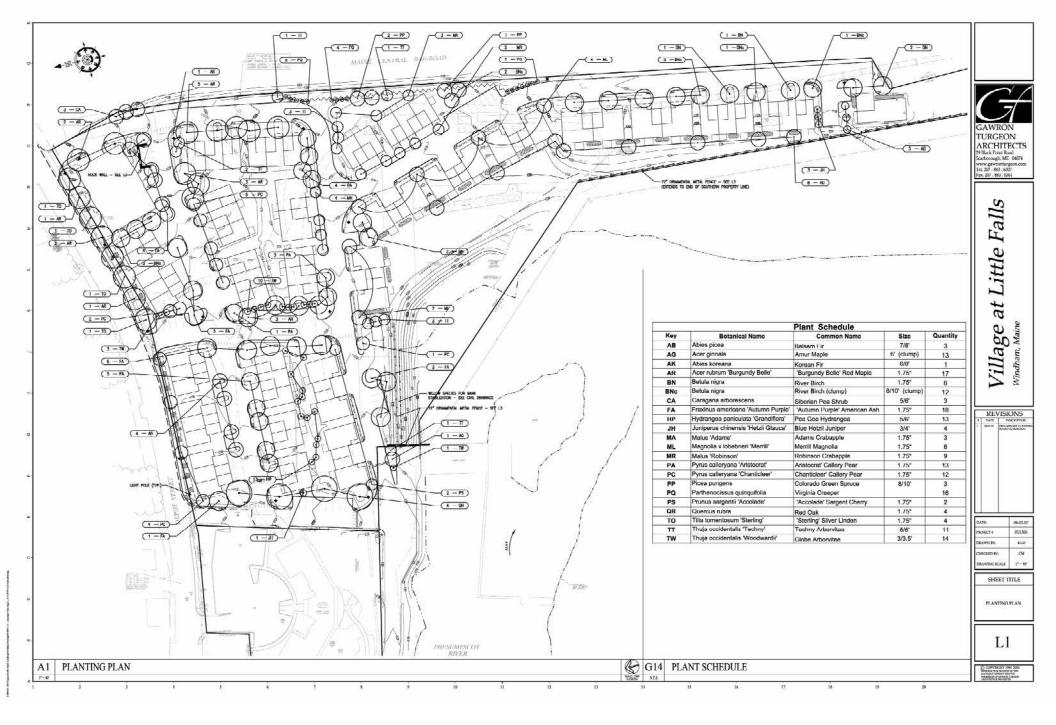


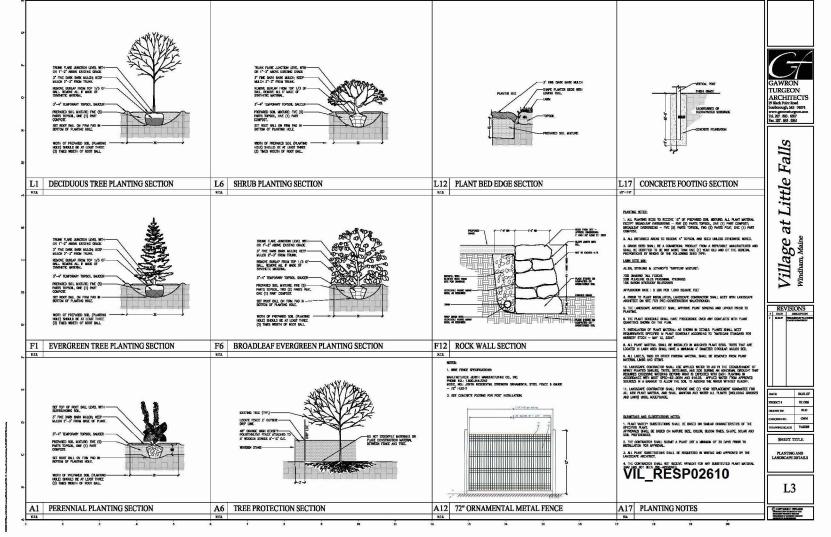


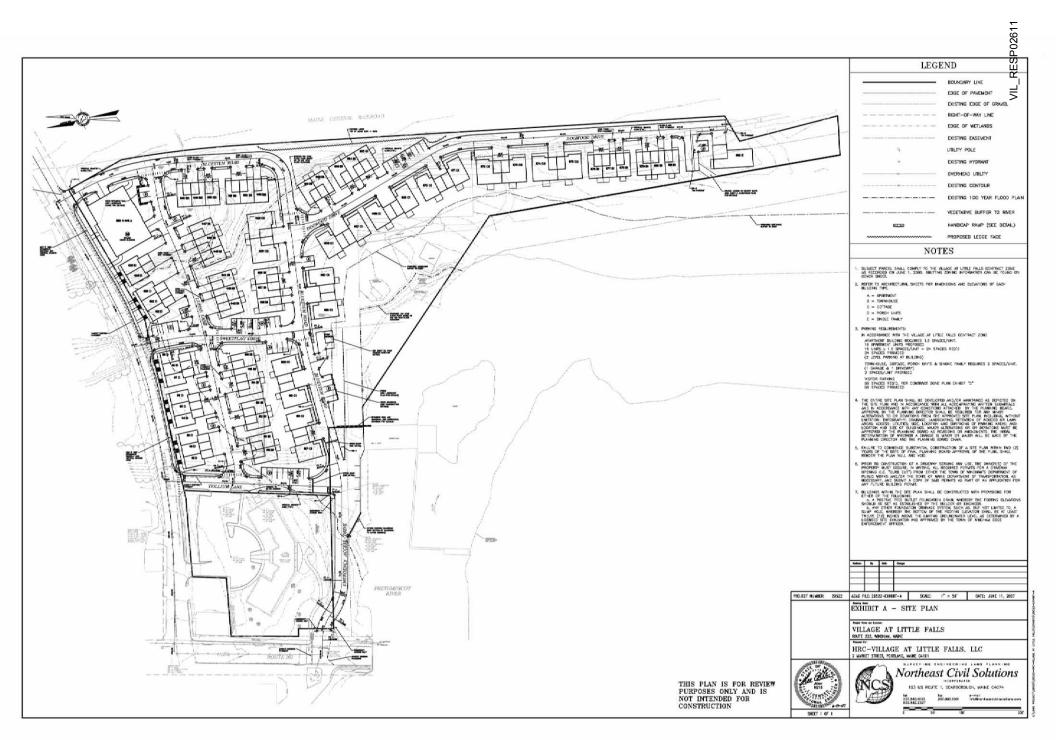


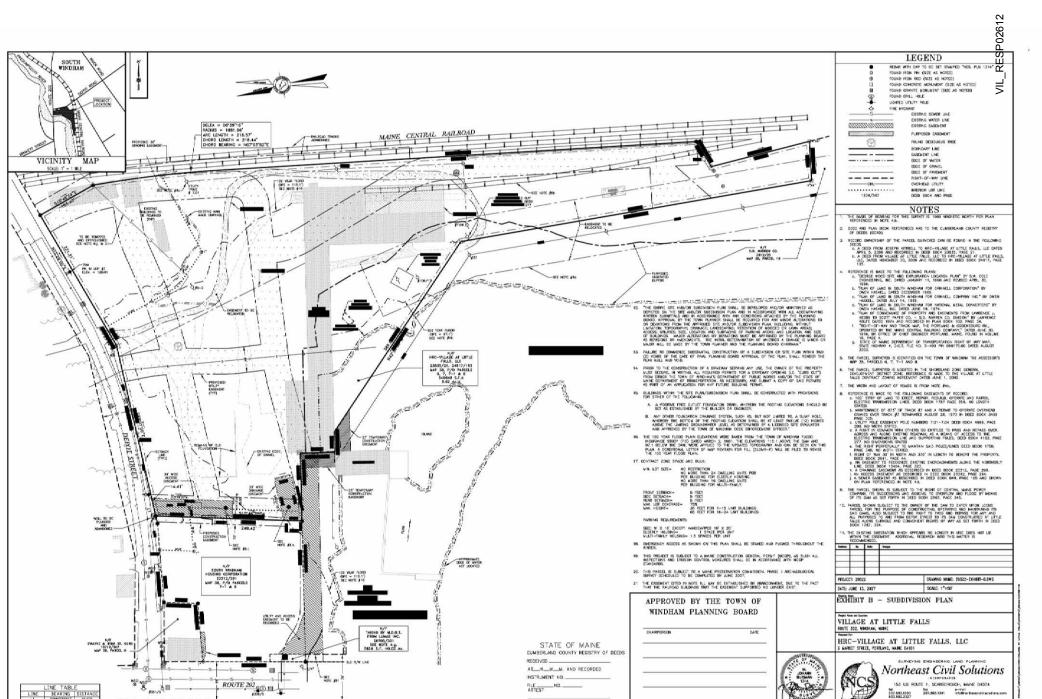




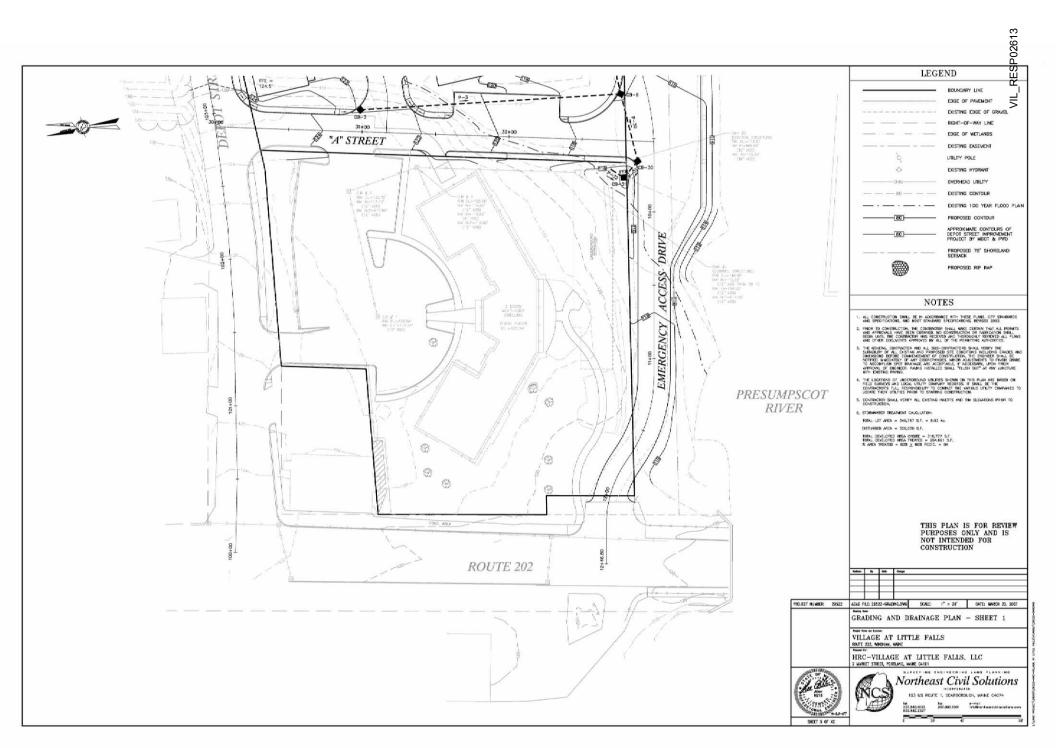


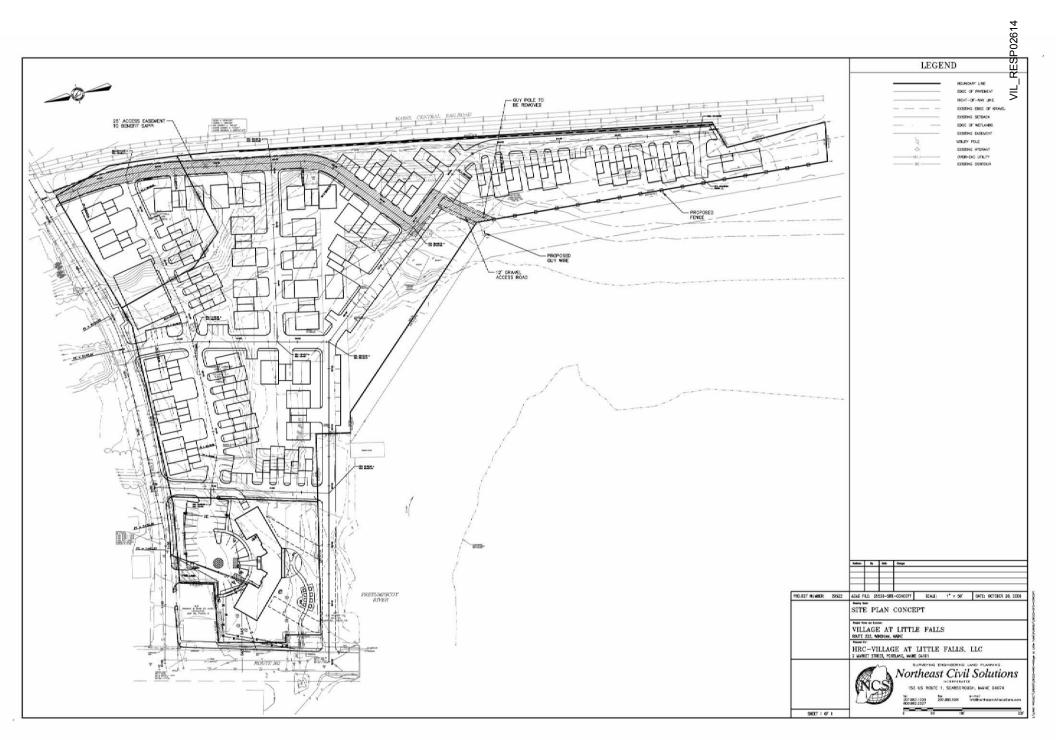






REGISTER





434 Cony Road Augusta, Maine 04240 Voice: 207/621-8334

Fax: 207/626-9094

Email: jcressey@summitenv.com



Memo

To: Tom Bartell, Town of Windham

From: John Cressey

CC: Laura Gay, MEDEP

Date: July 25, 2011

Jean Firth, MEDEP

Frank Gardner, USEPA

D. Todd Coffin, GEI

RE: Supplemental Sampling, April 2011

Keddy Mill, Windham, Maine

Tom,

Summit Environmental Consultants, Inc. (Summit) is pleased to provide the Town of Windham with this memorandum documenting supplemental soil sampling activities conducted at the Keddy Mill property located at 7 Depot Road in Windham, Maine during the week of April 25, 2011. See Figure 1 for a Site Location Map.

1.0 Background

On October 5, 2010, MEDEP and Summit performed soil sampling for PCBs across the site property. The intention of this sampling event was to determine whether or not the exterior soils were impacted with Polychlorinated Biphenyls (PCBs) above the USEPA's Toxic Substance Control Act (TSCA) action guideline of 1 part per million (ppm). A sample grid was established for the site and included 100-foot, 50-foot, and 25-foot grid spacing to help track sample locations and focus sampling on the area surrounding the mill building. Areas closer to the mill building used the 25-foot spacing to select sample locations, while areas further away from the operations areas utilized the 100-foot grid spacing.

Soil samples were collected from a maximum depth of two inches and collected using a clean pair of disposable nitrile gloves at each sample location. Once samples were collected they were logged onto a chain of custody and shipped to the USEPA Region 1 Environmental Testing Laboratory in North Chelmsford, Massachusetts for analysis of PCBs by the Region 1 Field Method.

PCB results ranged from non-detect to 1,100 ppm with the majority of the detections being for Aroclors 1248 and 1254, two common types of PCBs used in both dielectric fluids (i.e. transformers) and cutting oils. Based on the concentration levels, spatial distribution and matrix of materials where contamination was detected it appears that two sources of PCB contamination are present on the property. Lower concentrations could be associated with cutting oil and higher levels could be associated with former transformers. Based on the preliminary data it appears that the presence of PCB contamination immediately surrounding the former generator room is due to past spillage of

transformer oils and the secondary transport and tracking of the oil and impacted soils from this area onto and along the roadway. Additionally, the data suggests that the area further to the north of the building (C1.2), to the east of the building, to the south of the building, and along the roadways on-site may be due to former cutting oils and dripping of the metal filings along the roadway, and/or the disposal of these filings on the property.

To develop our conceptual model that there are two sources of PCBs present at the site a sample of the material suspected to be metal cuttings was sampled for TAL metals and PCBs. The analysis confirmed that the composition of the materials is metal cuttings related to former uses of the property. Additionally, the PCB analyses support the assumption that the cutting oils associated with the metal cutting process are a source of PCBs. The metals analysis also provides information on how future investigations may be able to distinguish between the PCB source areas.

2.0 2011 Sampling Rational

Based upon the initial 2010 soil investigation, Summit and the MEDEP revised the conceptual site model to include the potential for the steel filings to be a possible source of PCB impacts on the property. These filings, along with the presumed transformer impacts and transport mechanisms required additional sampling to attempt to delineate the areas. Additionally, a site visit completed in March documented the presence of metal slag along the southwestern border of the property. A decision to add this material into the conceptual model was made in order to determine if this material was also a possible source of PCB impacts.

3.0 April 2011 Sampling

Between April 25 and 30, 2011 149 samples were collected following the preapproved QAPP and were analyzed by EPA's Mobile Lab. Samples were collected from depths ranging from 2" to 52" in soils. Concrete samples from the onsite building were collected from the floor, walls and adjacent outside areas at depths ranging from ½" to 1". Ten percent of the samples (twenty five samples) were sent to EPA's laboratory in North Chelmsford. Samples were also screened with an XRF for (lead, calcium, iron, manganese, potassium, and cobalt). Four additional samples were analyzed by Maine Environmental Laboratory (MEL) of Yarmouth, Maine because we exceeded the capacity of EPA. Sample locations are shown on the attached map.

To characterize the three potential sources and to investigate the vertical distribution of PCB contamination in the soils samples were collected from discrete intervals at all locations and, , multiple depth discrete interval sampling was completed at selected locations. The conceptual site model was revised to include the 2011 data which resulted in a more accurate site map of the PCB distribution.

3.1 Exterior Soil Sample Interpretation

Unimpacted Area (North of the east-west roadway [Grids North of B1.3 through B4.1])

Soil samples collected from within this area were reported as non-detect and did not include observable metal filings. This area is to the north of the current fence on the property which was installed in May 2011 at the request of the MEDEP by the current property owner.

AOC-1, 2, and 3 Metal Cutting Source Area (South of the east-west roadway to the building and west of the building)

AOC-1

Sample concentrations ranged from non-detect within the north-south roadway to 18 ppm within the east-west roadway on-site. In addition, a majority of the samples collected along the roadway and within the footprint of a former structure north of the current dam structure were observed to contain metal filings. A correlation between the metal filing in this area and PCB concentrations was observed. The metal filings may have been used as a fill material as this area appears to have been cut and filled. Evidence of a cut on this portion of the site was observed around a tree whose roots (B3.2.3) are exposed approximately one foot above the current grade of the property. See Table 1 for analytical results and Figure 2 for sample locations.

AOC-2

Within this area appears to be a subarea (D2.1 through D4.1) where the source of the impacts may be related to past transformer spillage and/or storage. Samples immediately adjacent to the building ranged from non-detect to 197 ppm near the former generator room doorway at a depth of 4-6 inches. Samples collected from multiple depths along the edge of the building indicated that concentrations of PCBs decrease with depth but may extend to depths greater than 12 inches close to the former generator room (D3.3.1). The PCB impacts may have two sources along the northern edge of the building. Impacts from D4.3.2 to D2.1.4 appear to be related to transformer oil and tracking of these soils. Impacts associated with D5.1.3 to D6.1.2 appear to be associated with cutting oils as metal filings were observed in these locations. See Table 1 for analytical results and Figure 2 for sample locations.

AOC-3

In addition, within this area, soil samples were collected starting at the building and extending approximately 200 feet to the south. Sample concentrations, during this round of sampling, ranged from non-detect to 4.5 ppm (E4.4.2) in the center of this area. This area is within the newly installed fence.

AOC-4, Slag Area (Along the western property boundary and south of the building [south of the approximate slag extent line])

Based on visual observation and XRF results, soils in this AOC (approximately 1-acre) contain metal waste and/or slag material. Metal debris was observed to extend to a depth of 52 inches below ground surface (I5.4.2). PCB impacts were observed in four out of the 20 locations sampled over the two sampling rounds. Some of these impacts may be a result of traffic and not related to the metal waste/slag. However, the results from J6.2.3 (0-2" and 2-4") appear to be related to the metal waste material observed in the sample.

AOC-5

Several former building foundations and footprints were discovered within this portion of the property (and extending onto the adjoining property owned by Sappi Fine Paper). The history and function of these buildings are unknown. It appears that waste material observed in the samples (i.e. slag and metal waste) may have been from these buildings and may not be related to activities

at Keddy Mill. Based upon the results and relative unknown past usage in this area, additional investigations are need to characterize this area and determine the relationship to past site related activities at Keddy Mill.

3.2 Building Materials Sampling

Summit and the MEDEP included a limited investigation of concrete building materials in the 2011 investigation. The majority of the samples collected were based upon the locations where sludge was sampled by Ransom Environmental Consultants, Inc. (Ransom) in 2006.

Basement Floor

Twelve concrete samples were collected from within the basement level of the Site building. Six of the samples found elevated PCB concentrations. Sample B-D23 was submitted to the USEPA fixed-based lab and found to contain a total of 2.9 ppm PCBs. Initial screening of this sample in the mobile laboratory encountered interferences, which prevented an accurate determination of the PCB concentration. Results from floor samples were variable and did not indicate a consistent pattern. Future sampling will require tighter grid sampling to segregate impacted and non-impacted floor sections.

First Floor

Seventeen concrete floor and one concrete wall samples were collected from on the first floor of the Site building. Fourteen floor samples were collected from 0-1/2" with eleven of these samples reporting concentrations above 1 ppm. Three of these elevated floor samples were selected for deeper sampling (1/2-1"). The results of the deeper samples were very close to the shallow sample results (i.e. all exceeded cleanup standards). One sample collected from a wall (H12W) was reported at a concentration of 9.8 ppm.

Office/Second Floor

One concrete sample was collected at the top of the stairs on the second floor (O-B7). The results for this sample reported a concentration of 4.9 ppm PCBs. As the second floor was the former location of offices and no manufacturing occurred on this floor, it is assumed that this is due to traffic through impacted areas.

Extended Building Area to the East of the Structure

Concrete samples were collected at the east of the building adjacent to the former railroad tracks. Six concrete samples were collected within this area (four within a "breezeway" that connects the northern portion of the Site with the southern portion) and two from within a lower level adjacent to a cement ramp. Five of these concrete samples were reported to contain concentrations of PCB above the cleanup standard. These impacts may be associated with tracking of impacted soils or oil. However, cement samples from depths below ½" were not collected and therefore the depth of PCB contamination in the concrete is unknown in this area . An area bound with concrete walls and filled with crushed stone was observed along the southeastern portion of the building. This stone layer is at least two feet thick and its past usage is not known.

4.0 2011 Results

Total PCB concentrations in soils ranged from non-detect to 197 ppm. Total PCB concentrations were primarily related to Aroclor 1248 and 1254, two common types of PCBs used in both dielectric fluids (i.e. transformers) and cutting oils. Based on the findings and observations of the 2011 sampling, the CSM has been modified to include three potential sources of PCBs in the soils which have impacted five areas of concern identified to date. The three sources of PCB soil contamination include:

- Lower concentrations of PCBs associated with metal filings appear to be related to cutting oils.
- Lower concentrations of PCBs associated with slag material
- Higher concentrations of PCBs associated with the former transformers located in the former generator building.

The five areas of concern with elevated PCB in soils include

- AOC-1 Metal filings area adjacent to the current dam structure
- AOC-2 The transformer Spillage Area
- AOC-3 Area within 200-feet south of the mill building
- AOC-4 The slag area along the western property boundary
- AOC-5, The slag area at the south end of the property

In addition to the three sources of PCB contamination and the five AOCs, the 2011 sampling determined that cement building materials are also contaminated with PCBs on all levels and all areas of the mill building. However, additional sampling will be required to better determine the concentration distribution of PCBs in the building materials.

5.0 Quality Assurance

A conversation with Mr. Scott Clifford, the USEPA field chemist, indicated that the sample results are based upon "wet weight" and therefore are approximately 20-25% lower than they would be if dried prior to analyzing. As a result of this, Summit and the MEDEP determined that samples analyzed by the mobile lab greater than or equal to 0.8 ppm will be considered to be the cutoff for TSCA (instead of 1.0 ppm) at this time. When a cleanup occurs, the post removal sampling should be done in accordance with TSCA rules to verify that it has been done to their satisfaction.

Fifteen duplicate samples were collected at random locations to provide documentation of repeatability of the results. The relative percent difference between the initial samples and the duplicate samples ranged from 0% to 27.05% (B3.4.3). No duplicate samples were reported as being different than its initial sample in terms of TSCA cleanup requirements.

6.0 Recommendations

Based upon the analytical results, Summit recommends the following:

 A thorough characterization of the soils and building materials be completed to accurately determine the areas requiring cleanup; and July 25, 2011

2. Once the characterization is complete, a remediation plan should be developed and submitted to the USEPA TSCA Unit for approval.

434 Cony Road Augusta, Maine 04240 Voice: 207/621-8334

Fax: 207/626-9094 Email: icressey@summitenv.com



Memo

To: Laura Gay, MEDEP Project Manager From: John Cressey, Project Manager

CC: Michael Deyling, Project QA Officer Date: April 11, 2011

Troy Smith, MEDEP Project Geologist

Jean Firth, MEDEP Brownfields Coordinator

RE: QAPP – Keddy Mill PCB Sampling – Addendum to "RFA#05353 Addendum 7 Depot"

BACKGROUND

The former Keddy Mill site originally developed in the late 1700s as a saw mill. Changes in usage and manufacturing eventually led to its use as a steel mill from the mid-1950s until its closure in the mid-1970s. Transformers and cutting oils containing Polychlorinated Biphenyls (PCBs) were used within the facility.

Between 2003 and 2006, Ransom Environmental Consultants, Inc. collected over thirty soil, wood, and wipe samples for Polychlorinated Biphenyl (PCB) analysis within the former Keddy Mill. Based upon the results from these sampling events, a Self-Implementing PCB Removal Plan was completed and submitted to the USEPA's Toxic Substance Control Act (TSCA) Unit. The plan was approved in 2006 by TSCA for the removal of sludge and solids located within the facility as the first phase of a cleanup action.

In February 2010, the Town of Windham and Summit Environmental Consultants, Inc. (Summit) approached the USEPA and Maine Department of Environmental Protection (MEDEP) regarding the possibility to complete the first phase of the cleanup under the Town's Hazardous Assessment Grant. Based upon the costs and the potential for contact due to the current state of the building, it was determined that this cleanup should be completed by the current owner of the property. A request to further characterize three specific piles of soil was made by the current property owner to determine whether these piles require removal due to PCB impacts. It was determined, through sampling, that the piles on the first floor were above TSCA cleanup standards. In May 2010, the soils exhibiting elevated PCB levels were removed by a hazardous waste contractor and disposed of at a licensed facility.

In October 2010, Summit and the MEDEP conducted a soil sampling campaign across the property to determine the potential extent of PCB impacts outside of the building. The results of this investigation indicated that elevated concentrations of PCBs were present across a large portion of the property. To further evaluate and delineate laterally and horizontally these impacts, Summit and the MEDEP propose to conduct additional soil sampling outside of the building and to also collect concrete samples from discrete locations within the building to attempt to correlate exterior results with possible source locations.

CONCEPTUAL SITE MODEL

PCBs in the soil outside of the building and within concrete inside the building pose a risk to human health and the environment. Our current conceptual model of the PCB contamination is that we have two primary sources. We have a soil source from former transformers and we have a source from the cutting oils used during steel manufacturing. The PCBs have been spread around the site by physically moving contaminated dirt, traffic through oils and contaminated dirt, and using of metal cuttings as fill in various areas on the site. There is also a potential secondary source from the building materials.

This investigation will assist in developing an overall conceptual site model for the property whereby cleanup protocols can be established based upon contamination levels and potential sources of PCBs.

DATA QUALITY OBJECTIVES

This investigation will determine if elevated PCBs are within the concrete located in the first floor and the basement areas and to assist in delineating the impacts documented in the soils outside of the building in October of 2010. This information will assist in developing a TSCA Self-Implementation clean-up plan for the soils and a work plan for the remainder of the concrete inside of the building for the future.

SCOPE OF WORK

Exterior Samples

A total of one hundred twenty-five surface soil samples (SS-201 through SS-225 and thirteen confirmatory samples; see Figure 3-2) will be collected with a hand trowel or hand auger (to be used within the soil piles) across the site. Sample locations will be selected based on a grid system developed by MEDEP to provide distribution based upon past site usage, potential contamination areas, and previously identified areas of contamination to further delineate impacts. The soil samples will be analyzed by a modified field screening method 8082 by the New England Regional Laboratory's mobile laboratory. The samples listed as "duplicates" will be described as confirmatory samples analyzed by the regular fixed laboratory Method 8082 at a rate of 10% of the field screening method and submitted to USEPA's fixed laboratory in North Chelmsford, Massachusetts.

Interior Samples

A total of twenty concrete chip samples (SS-226 through SS-446 and two duplicates) will be collected from within the building to attempt to determine if elevated concentrations are present within the building. These samples will be collected from areas believed to have been the most likely locations of equipment and or metal cutting equipment which had reservoirs of oil and may have contained PCB-contaminated oil. Concrete chip samples will be collected following the USEPA Response Team's Chip, Wipe, and Sweep SOP. The concrete samples will be analyzed by a modified field screening method 8082 by the New England Regional Laboratory's mobile laboratory. The samples listed as "duplicates" will be described as confirmatory samples analyzed by the regular fixed laboratory Method 8082 at a rate of 10% of the field screening method and submitted to USEPA's fixed laboratory in North Chelmsford, Massachusetts.

SAMPLE ANALYSIS

The samples will be analyzed by a modified field screening method 8082 by the New England Regional Laboratory's mobile laboratory. The samples listed as "duplicates" will be described as confirmatory samples analyzed by the regular fixed laboratory Method 8082 at a rate of 10% of the field screening method and submitted to USEPA's fixed laboratory in North Chelmsford, Massachusetts.

REPORTING

Summit will prepare a memo report documenting sample techniques and sample results for submittal to the MEDEP.

SIGNATURES

John K. Cressey, Summit Project Manager

Muchael Dugling

Michael A. Deyling, C.G., Summit Project QA Officer

Laura Gay, MEDEP Brownfields Manager

Troy Smith, MEDEP Project Geologist

FINAL SUBDIVISION & SITE PLAN APPLICATION

VILLAGE AT LITTLE FALLS

Route 202
Tax Map 38, Parcels 6&7
Windham, Maine

Prepared For:
HRC – Village at Little Falls, LLC
2 Market Street
Portland, Maine 04101

August 2007



Prepared by: Northeast Civil Solutions, Inc. 153 U.S. Route 1 Scarborough, ME 04074

29522

VIL_RESP02624

Town of Windham

Planning Department 8 School Road Windham, ME 04062

voice 207.892.1902

fax 207.892.1916

October 25, 2007

HRC Village at Little Falls Attn: Steve Etzel 2 Market Street Portland, Maine 04102

Dear Mr. Etzel:

I am writing to confirm the Planning Board's approval of the Village at Little Falls application for the property located at 7 and 13 Depot Street, identified on Tax Map: 38, Lots: 6, 7, Zone: Little Falls Contract Zone.

For your records, the Planning Board voted four (4) to zero (0) to approve the subdivision plan application with conditions. The motion was made by Dave Nadeau and seconded by Keith Williams.

Enclosed, please find the findings of fact and conclusions and conditions of approval.

Sincerely,

Brooks More, AICP Director of Planning

Beel More

Enclosure: Findings of Fact and Conclusions

FINDINGS OF FACT

A. POLLUTION AND SEWERAGE DISPOSAL

• The project will be connected to the public sewer and water system. As a result, it will not produce an undue amount of pollution.

B. WATER

 The Portland Water District confirmed its capacity of serve the project in a letter dated March 16, 2007.

C. SOIL EROSION

- The project received a Site Location of Development Act Permit and a Natural Resources
 Protection Act permit from the Maine Department of Environmental Protection (MDEP) on July 26,
 2007. The permit numbers have been added to the plans.
- The applicant has received approval from the MDEP to meet the quality, but not quantity standards
 of Stormwater Management Law. The "beat-the-peak" method to stormwater discharge is
 appropriate for this site's proximity to the river.
- Larry Bastian, P.E. of Gorrill-Palmer Consulting Engineers performed the peer review of the stormwater, soil and erosion control plans. Bastian's initial comments can be found in the attached letter dated July 5th, 2007. Based on subsequent revisions to the plans, Bastion submitted a second letter dated August 3, 2007 which found that the plans meet the Town of Windham's ordinances.
- A storm drain pipe running from Depot Street to the Presumscott River has been identified on this
 site. The exact course of the buried pipe will not be known until site work commences. It does
 appear from die tests that the pipe runs under the existing mill building and discharges somewhere
 in the river. Since the pipe will be disturbed during the construction phase of the project, the Town
 has contracted with Pine Tree Engineering to create a plan for replacement of the pipe. At this
 time, the Town is awaiting the results of this study.

D. TRAFFIC

- The traffic study prepared by William J. Bray, P.E. concluded that the project will not require an MDOT Traffic Movement Permit, that there are no high-crash locations in the area, that the project will not decrease the level of service of the intersections in the study area, and that adequate sight distance exists at the proposed driveways.
- A peer review of the traffic study was conducted by Gorrill-Palmer Consulting Engineers, Inc. in a letter dated July 5, 2007. The review found that the study was completed in accordance with industry standard practices.
- The peer review listed five comments for consideration. Bill Bray, P.E. provided additional information on August 11, 2007 in response to the peer review comments. Gorrill-Palmer concluded in a letter dated August 15, 2007 that a left turn lane is not warranted at the intersection of Depot Street and River Road.

E. SEWERAGE

- The project will connect to the public sewer system.
- The Portland Water District will review and approve the final sewer system designs.
- In letter dated March 16, 2007, the Portland water District confirmed its ability to serve the project once improvements have been completed. These improvements are currently under construction, and are anticipated to be completed at the end of 2007.
- The Portland Water District will assume responsibility for the wastewater collection system.

 A pump station will be constructed as part of this project. The pump station will replace the Windham Fire Pump and the Androscoggin Street Pump Station.

F. SOLID WASTE

Solid Waste will be the responsibility of Home Owners Association.

G. AESTHETICS

- A letter from the Maine Department of Conservation dated December 12, 2005 has confirmed that no rare botanical features have been documented in the project area.
- A letter from the Maine IF&W dated January 17, 2006 confirmed that no endangered fish species or habitat exists in the vicinity of the project.
- A letter from the Maine Historic Preservation Commission dated June 27, 2007 confirmed that there will be no historic or archaeological properties affected by the proposed development.
- The applicant received approval from the MDEP a Voluntary Response Action Program No Action Assurance Letter on November 9, 2005. The letter agreed with the applicant's proposed contamination mitigation plan. The plan included the removal and/or containment of soils contaminated by petroleum and PCBs.

H. CONFORMITY WITH LOCAL PLANS AND ORDINANCES

Comprehensive Plan:

 The project is located within the South Windham Growth Area as depicted on the 2003 Future Land Use Map. The project also falls under Chapter 1, Section H, Subsection 6 that states, "A portion of South Windham, directly across the Presumscott River from Gorham, should be designated as a growth area..."

Land Use Ordinances:

- The application meets the standards of the Village at Little Falls Contract Zone Agreement. In
 particular, all of the proposed uses in the proposed subdivision are listed in the uses permitted by
 the contract zone. As a result, the Village at Little Falls subdivision application is governed by,
 and only by, the standards of the Village at Little Falls Contract Zone.
- Community Facilities Impact Analysis:
 - The applicant's analysis finds that the improvements to the site (removal of derelict mill building and pump station construction), increase in property taxes, off-site improvements to Depot Street, and recreation fees will offset the increase of 8 students in the school system.

Others:

- Fire Department: The Fire Department submitted a memo dated August 10, 2007. The memo confirmed that the turning radii within the development have been adequately designed for emergency vehicle movement. In addition, the memo stated the following:
 - . The Department's objection to additional speed bumps on the SAPPI access drive,
 - Snow removal around the fire hydrants should be performed by the Condominium Association (language was added to the Condo Association documents),
 - On-street parking should be restricted (a condition of approval has been added).

I. FINANCIAL AND TECHNICAL CAPACITY

- The applicant has submitted documents of financial and technical capacity.
- J. RIVER, STREAM OR BROOK IMPACTS

- The project site is adjacent to the Presumscott River. The project has been designed to treat the quality of water discharged into the river. See Section C. Soil Erosion, above.
- The stormwater management plan calls for water to be discharged to the river prior to flood stage. The beat-the-peak method is appropriate for a site adjacent next to the river.
- The applicant received a Conditional Letter of Map Revision for Fill (CLOMR-F) from the Federal Emergency Management Agency (FEMA) on May 8, 2007. The map revision will amend the flood rate maps once the as-builds for the project are submitted to FEMA.

CONCLUSIONS

- 1. The proposed subdivision will not result in undue water or air pollution.
- 2. The proposed subdivision **has** sufficient water available for the reasonably foreseeable needs of the site plan.
- 3. The proposed subdivision will not cause an unreasonable burden on an existing water supply.
- 4. The proposed subdivision **will not** cause unreasonable soil erosion or a reduction in the land's capacity to hold water so that a dangerous or unhealthy condition results.
- The proposed subdivision will not cause unreasonable highway or public road congestion or unsafe conditions with respect to the use of the highways or public roads existing or proposed.
- 6. The proposed subdivision will provide for adequate sewage waste disposal.
- 7. The proposed subdivision **will not** cause an unreasonable burden on the municipality's ability to dispose of solid waste.
- 8. The proposed subdivision **will not** have an undue adverse effect on the scenic or natural beauty of the area, aesthetics, historic sites, significant wildlife habitat identified by the Department of Inland Fisheries and Wildlife or the municipality, or rare and irreplaceable natural areas or any public rights for physical or visual access to the shoreline.
- 9. The proposed subdivision **conforms** with a duly adopted site plan regulation or ordinance, comprehensive plan, development plan, or land use plan.
- The developer has adequate financial and technical capacity to meet the standards of this section.
- 11. The proposed subdivision is situated entirely or partially within the watershed of any pond or lake or within 250 feet of any wetland, great pond or river as defined in Title 38, Chapter 3, subchapter I, article 2-B M.R.S.A.
- 12. The proposed subdivision **will not** alone or in conjunction with existing activities, adversely affect the quality or quantity of ground water.
- 13. The proposed subdivision is situated entirely or partially within a floodplain.
- 14. All freshwater wetlands within the proposed subdivision have been identified on the plan.
- 15. Any river, stream, or brook within or abutting the subdivision **has** been identified on any maps submitted as part of the application.
- 16. The proposed subdivision will provide for adequate storm water management.
- 17. If any lots in the proposed subdivision have shore frontage on a river, stream, brook, or great pond as these features are defined in Title 38, section 480-B, none of the lots created within the subdivision **has** a lot depth to shore frontage ratio greater than 5 to 1.
- The long-term cumulative effects of the proposed subdivision will/will not unreasonably increase a great pond's phosphorus concentration during the construction phase and life of the proposed subdivision.
- 19. For any proposed subdivision that crosses municipal boundaries, the proposed subdivision will not cause unreasonable traffic congestion or unsafe conditions with respect to the use of existing public ways in an adjoining municipality in which part of the subdivision is located.
- 20. Timber on the parcel being subdivided **has not** been harvested in violation of rules adopted pursuant to Title 12, section 8869, subsection 14 M.R.S.A.

CONDITIONS OF APPROVAL

- 1. Approval is dependent upon, and limited to, the proposals and plans contained in the application dated June 1, 2007, as amended August 24, 2007 and supporting documents and oral representations submitted and affirmed by the applicant, and conditions, if any, imposed by the Planning Board, and any variation from such plans, proposals and supporting documents and representations are subject to review and approval by the Planning Board.
- 2. The applicant will obtain a 20 foot grading easement from Pan Am to construct the proposed retaining wall. The applicant shall also obtain from Pan Am the right to remove two buildings that encroach on the Pan Am property.
- The applicant shall install no parking signs along the length of Dogwood Drive. The placement of these signs shall be incorporated into the plans and approved by the Fire Department.
- 4. The applicant shall pay a recreation impact fee of \$36,000.00. The fee shall be paid on a per unit basis prior to the issuance of a certificate of occupancy for the unit(s) on which a fee is owed.
- 5. The Town of Windham's stormdrain from Depot Road to the Presumscott River shall be replaced to the Public Works Director's satisfaction prior to the base pavement of Lavender Lane.

Town of Windham

Planning Department 8 School Road Windham, ME 04062

voice 207.892.1902

fax 207.892.1916

October 25, 2007

HRC Village at Little Falls Attn: Steve Etzel 2 Market Street Portland, Maine 04102

Dear Mr. Etzel:

I am writing to confirm the Planning Board's approval of the Village at Little Falls application for the property located at 7 and 13 Depot Street, identified on Tax Map: 38, Lots: 6, 7, Zone: Little Falls Contract Zone.

For your records, the Planning Board voted four (4) to zero (0) to approve the site plan application with conditions. The motion was made by Dave Nadeau and seconded by Keith Williams.

me Michail

Enclosed, please find the findings of fact and conclusions and conditions of approval.

Sincerely,

Brooks More, AICP Director of Planning

Enclosure: Findings of Fact and Conclusions

Beal Mare

FINDINGS OF FACT

Utilization of the Site

- The central portion of the site is occupied by the abandoned mill building. In addition, the slabs or foundations of other structures still remain. The site is directly adjacent to the Presumscott River and Little Falls Dam.
- The downstream portion of the site is wooded.
- The proposed development will removed the existing mill building, concrete foundations and assorted debris.

Vehicular and Pedestrian Traffic

- The findings of the traffic study, and the Town's peer review, are found in the subdivision review.
- The applicant will be contributing to utility and roadway improvements on Depot Street. These improvements are a joint project of the Town, applicant and Portland Water District. The applicant has stated their willingness to obtain bid pricing for the Depot Street improvements.
- The plan provides internal sidewalks on one side of each roadway.

Sewage Disposal and Groundwater Impacts

See Subdivision Review.

Stormwater Management

See Subdivision Review.

Erosion Control

See Subdivision Review.

Utilities

All utilities have been proposed to be placed underground.

Financial Capacity

See Subdivision Review.

Landscape Plan

- The applicant has provided a landscape plan on sheet L1. In addition to existing vegetation along the Pan Am railroad right-of-way, the project provides adequate screening for abutting properties.
- The landscape plan includes riverbank restoration on the Presumscott River. This work is being
 done in accordance with the DEP permit and instructions from the Department of Inland Fisheries
 and Wildlife.
- Maintenance language for the stormwater treatment plantings has been added to the Condominium Association Documents.

Conformity with Local Plans and Ordinances

See Subdivision Review.

Impacts to Adjacent/Neighboring Properties

 The removal of the abandoned mill building and associated industrial waste will improve conditions in the South Windham neighborhood.

CONCLUSIONS

- 1. The plan for development **reflects** the natural capacities of the site to support development.
- 2. Buildings, lots, and support facilities **will** be clustered in those portions of the site that have the most suitable conditions for development.
- 3. Environmentally sensitive areas, including but not limited to, wetlands; steep slopes; flood plains; significant wildlife habitats, fisheries, and scenic areas; habitat for rare and endangered plants and animals; unique natural communities and natural areas; and, sand and gravel aquifers will be maintained and protected to the maximum extent.
- 4. The proposed site plan **has** sufficient water available for the reasonably foreseeable needs of the site plan.
- 5. The proposed site plan **will not** cause unreasonable soil erosion or a reduction in the land's capacity to hold water so that a dangerous or unhealthy condition results.
- 6. The proposed use and layout **will** be of such a nature that it will make vehicular or pedestrian traffic no more hazardous than is normal for the area involved.
- 7. The proposed site plan will provide for adequate sewage waste disposal.
- 8. The proposed site plan **conforms** to a duly adopted site plan regulation or ordinance, comprehensive plan, development plan, or land use plan.
- 9. The developer has adequate financial capacity to meet the standards of this section.
- 10. The proposed site plan **will not** alone or in conjunction with existing activities, adversely affect the quality or quantity of ground water.
- 11. The proposed site plan will provide for adequate storm water management.
- 12. The proposed location and height of buildings or structure walls and fences, parking, loading and landscaping shall be such that it **will not** interfere or discourage the appropriate development in the use of land adjacent to the proposed site or unreasonable affect its value.
- 13. On-site landscaping **does** provide adequate protection to neighboring properties from detrimental features of the development that could be avoided by adequate landscaping.

CONDITIONS OF APPROVAL

 Approval is dependant upon, and limited to, the proposals and plans contained in the application dated July 1, 2007, as amended August 24, 2007 and supporting documents and oral representations submitted and affirmed by the applicant, and conditions, if any, imposed by the Planning Board, and any variation from such plans, proposals and supporting documents and representations are subject to review and approval by the Planning Board.



Northeast Civil Solutions

INCORPORATED

153 U.S. Route I

August 27, 2007

Scarbsrough Maine 04074

Mr. Brooks More, Planning Director Town of Windham

25 School Street

Windham, ME 04062

tel

207.883.1000

Dear Brooks.

800.882.2227

fax

207,883,1001

Enclosed, please find fifteen copies of the Final Subdivision and Site Plan Applications for the Village at Little Falls Project. We would like to meet with the Planning Board on September 10, 2007 to request final approval of the project. The applicant, HRC-Village at Little Falls, LLC, has already obtained the necessary permits from the Maine Department of Environmental Protection and the Federal Emergency Management Agency (FEMA). Copies of these approvals are included in Exhibit 20 of the attached subdivision application.

RE: Village at Little Falls Final Subdivision and Site Plan Application

As we have discussed previously, a 20-foot wide temporary grading easement along the Maine Central Railroad will need to be obtained from Pan-Am Railrays (Pam-Am Railways recently bought Gilford Industries). The applicant requests that the acquisition of this grading easement be a condition of approval.

The applicant, HRC-Village at Little Falls, LLC, will be contributing funds for the improvements of Depot Street. The applicant has had several previous discussions with the Windham Public Works Department and the Portland Water District regarding these off-site improvements. In order to help facilitate the process, HRC-Village at Little Falls, LLC will solicit bid prices for the offsite work.

We look forward to further discussing this project with you. If you should have any questions or comments please feel free to contact us at any time.

Sincerely,

Northeast Civil Solutions, Inc.

Lee Allen, P.E.

Vice President

Cc: Renee Lewis, HRC-Village at Little Falls Steve Etzel, HRC-Village at Little Falls Rachel Sunnell, Gawron Turgeon Architects Paul Destefano, Oak Engineers William Bray, PE, Traffic Solutions

Town of Windham

Planning Department 8 School Road Windham, ME 04062

voice 207.892.1902

fax 207.892.1916

PLANNING BOARD NOTICE OF PUBLIC HEARING Monday, September 10, 2007 Conference Room 1-7:00 pm

07-06 Village at Little Falls. HRC Village at Little Falls, LLC for review of a proposed 82 unit residential subdivision. Property is located at 7 and 13 Depot Road. Tax Map: 38, Lots: 6, 7, Zone: Little Falls Contract District.

The plans are available for review in the Community Development Office, Monday through Friday, between 7:00 am and 4:30 pm. If you have any questions or concerns we can be contacted at (207) 892-1902.

Please notify us of special needs you have due to a disability.

TABLE OF CONTENTS

SECTION A - FINAL SUBDIVISION APPLICATION

Exhibit 1 (Amended)	Soils
Exhibit 2 (Amended)	
Exhibit 18 (Amended) Community Facilities Impact
Exhibit 19 (Amended) Compliance with Town Standards
Exhibit 20	Approvals from Other Agencies
Exhibit 21	Development Impact Fees
Exhibit 22	Conformance with Subdivision General Purpose

SECTION B-FINAL SITE PLAN APPLICATION

Exhibit 8	Waiver Requests
Exhibit 10	Sewage Disposal Connections
Exhibit 11	Flood Elevation
	Elevation of Buildings
Exhibit 13	Elevation of Signs
	Conformance with Town Site Plan Requirements
	Financial Capacity
	Technical Capacity
2015년 1일	Consultant Description
department of the contract of	Approvals from other Agencies
the first of the first water for the first of the first o	Community Facilities Impact
20、10、10、10、10、10、10、10、10、10、10、10、10、10	Development Impact Fees

FINAL SUBDIVISION APPLICATION

VILLAGE AT LITTLE FALLS

Route 202 Tax Map 38, Parcels 6&7 Windham, Maine

Prepared For:
HRC – Village at Little Falls, LLC
2 Market Street
Portland, Maine 04101

August 2007



Prepared by: Northeast Civil Solutions, Inc. 153 U.S. Route 1 Scarborough, ME 04074

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Praise.	

TOWN OF WINDHAM, MAINE MAJOR SUBDIVISION PLAN APPLICATION FORM – Final Plan

(Ordinance Chapter 213 Article VI)

The final subdivision plan application shall include fifteen (15) copies of each plan, map, or drawing, and any related information which shall be printed or reproduced on paper.

Please identify any amended or modified identification information about the applicant, name, location, or proposed use of project, contact person/agent, or other information included on the cover page of the previously submitted Major Preliminary Subdivision Preapplication/Sketch Plan applications.

Application	ID#		
		A second	

√ if Amended	Type of Information	Description of Information	Date Amended
- Milliand Andrews	- X - X - X - X - X - X - X - X - X - X		
	·		
5 5 H. 3 4 F			

Please complete and sign the following:

	Check when co	mpleted
	Applicant	Staff
Request for plan to be divided into two or more sections subject to any conditions of the plan? Yes_ If yes, number of sections No X	X	
I certify that I received and read the PLANNING BOARD APPLICATION PROCEDURES AND REQUIREMENTS and that all the information in this application form and accompanying materials is true and accurate to the best of my knowledge.		
Signature of Applicant (If signed by applicant's agent, provide written documentation of authority to act on behalf of applicant.)	X	
Print or type name and title of signer Lee Allen, Project Manager, Northeast Civil Solutions, Inc.	X	
Date Prepared: August 24, 2007	X	

Approved		VIL_	RESP02638
Varente: l	1	Long Salatis is on Man 4 hour Dism	_



\$67,843.1693

500.382.2375

107.883.4011

Northeast Civil Solutions

INCORPORATED

February 12, 2007

To Whom It May Concern:

RE: Village at Little Falls, LLC

I, Steve Etzel, on behalf of HRC-Village at Little Falls, LLC, authorize Northeast Civil Solutions, Inc. to sign any and all applications, plans, permit requests, and other paperwork in conjunction with obtaining final municipal and state approval for the Village at Little Falls residential development on Route 202 in Windham, Maine.

Steve Etzel, Vice Pres.

Date

FED 1 4 2007

Major Final Subdivision Plan EXHIBIT CHECKLIST

Please identify each exhibit (1-3) or Amendment or Modification of Any EXHIBITS submitted as part of the previous Major Preliminary Subdivision ir Preapplication/Sketch Plan applications.

√ if Amen	ded:			
√ Amended	EXHIBIT	1	Soils	
$\sqrt{\mathbf{A}}$ Amended	EXHIBIT	2	Covenants and Easements	
Amended	EXHIBIT	3	Community Facilities & Utilities	
Amended	EXHIBIT	4	Description of Project	
_ Amended	EXHIBIT	5	Cluster Development	
Amended	EXHIBIT	6	Right Title or Interest	
_ Amended	EXHIBIT	7	Corporate or Partnership Status	
_ Amended	EXHIBIT	8	Location Map	
_ Amended	EXHIBIT	9	Requested Waivers	
_ Amended	EXHIBIT	10	Sewage Disposal	
_ Amended	EXHIBIT	11	Erosion and Sediment Control	
_ Amended	EXHIBIT	12	Flood Elevations	
_ Amended	EXHIBIT	13	Access to Property	
	EXHIBIT	14	Financial Capacity	
_ Amended	EXHIBIT	15	Technical Capacity	
	EXHIBIT	16	Consultant Description	
	EXHIBIT	17	Conformance with State Delegated Review	
	EXHIBIT	18	Common Facilities Impact	
√ Amended	EXHIBIT	19	Conformance with Town Standards	
√ and list, if Amended:				
Exhibit 1	Additional	<u>inform</u>	ation regarding Slope Stability and Pre-loading is attached.	
Exhibit 2	The Mainter	nance S	Section of the Condominium Association Documentation	
	was updated and revised as requested.			
Exhibit 19	Additional	<u>inform</u>	ation regarding traffic is also attached.	
Please mark	Please mark each exhibit in the application as follows:			
EXHIBIT	20 Appr	ovals f	rom Other Agencies	
EXHIBIT	21 Development Impact Fees			
EXHIBIT	·			

Major Final Subdivision Plan Application

The major final subdivision plan shall be submitted with one (1) ink mylar and all maps and drawings shall be printed or reproduced in the same manner as the major preliminary subdivision plan. Space shall be reserved thereon for endorsement by all appropriate agencies (Section 213-10.A.). The final plan shall include the following information:

	Check when cor	npleted
	Applicant	Staff
I. APPROVAL OF OTHER AGENCIES AND PROFESSIONALS		
Include as Plan Reference Notes on the plan (see III.C. below) and attach, as <u>EXHIBIT 20</u> , written approval of other agencies and professionals, as follows (Section 213-9.CE.):		
A. the State of Maine Department of Environmental Protection Site Location of Development and/or Chapter 500 Stormwater, including permit numbers and dates of approval	X	
 B. for water supply: 1. the Portland Water District if existing or proposed public water service is to be used <u>or</u> 	X	
2. the State of Maine Department of Health and Welfare if a central water supply system is proposed or	NA	
3. a civil engineer registered in the State of Maine, if individual wells serving each building site is proposed. The Planning Board may also require the applicant to submit the results of water quality tests as performed by the State of Maine Department of Health and Welfare	NA	
C. for sewage disposal: 1. the sanitary sewer district if existing or proposed public disposal systems are proposed or	X	-
2. the State of Maine Department of Health and Welfare and the local Plumbing Inspector if a separate central sewage collection and treatment system is proposed or if individual septic tanks are to be installed by the builder	NA	
II. PRELIMINARY SUBDIVISION PLAN-		
All plans and information provided as part of preliminary plan, location map, and any amendments suggested or required by the Planning Board (Section 213-10.A.1.)	X	
III. SUBDIVISION PLAN DRAWINGS AND MAPS showing or accompanied by the following information: A. Subdivision Plan drawings		
1. Number and date all sheets and provide space for revision dates	X	P
2. Show all dimensions in feet and decimals, drawn to a scale of not more than one hundred (100) feet, preferably forty (40) feet, to the inch	X	
3. Show the entire parcel(s), plus streets, private ways or roads, owners, land use, and zoning on and adjacent to property	X	
B. Title Block		25.5
1. Identify plan as "Final Major Subdivision Plan", "Amended" if applicable	X	
- A A - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 -	\/II	CCC

Approved		VIL_RESP0264
Aniended	3	Major Subdivision Plan Final Plan

	Check when cor	
	Applicant	Staff
2. Name and address of project	X	
3. Name(s) and address(es) of owner(s) of record and applicant	X	
4. Name(s) and address(es) of plan designer(s)	X	10 2 3a N. Lewis
C. Plan References		
1. North arrow (using Maine State Grid)	X	
2. Graphic map scale	X	
3. The name, registration number, and seal of the Maine professional	X	
land surveyor or professional (civil) engineer or name of the planning		
consultant who prepared the plan (Section 213-10.A.2.)		
D. Waiver Notes		Astrophysic
Notes regarding all previously approved and additionally requested	NA	
waivers		
E. Conditions of Approval		er sayakar ber Programmas da
1. Describe all conditions of major preliminary subdivision plan	X	
approval		
2. The following Sunset Provision note: "Failure to commence	X	•
substantial construction of a subdivision within two (2) years of the date		
of final Planning Board approval of the Plan shall render the Plan null		
and void." (Section 213-11.E.)		
3. The following Amendment/Revision note: "The entire subdivision	X	
plan shall be developed and/or maintained as depicted on the subdivision		
plan and in accordance with all accompanying written submittals and in		
accordance with any conditions attached by the Planning Board.		
Approval by the Planning Director shall be required for any minor		
alterations to or deviations from the approved subdivision plan,		
including, without limitation: topography; drainage; landscaping;		
retention of wooded or lawn areas; access; utilities; size, location and		
surfacing of parking areas; and location and size of buildings. Major		
alterations or deviations must be approved by the Planning Board as		
revisions or amendments. The initial determination of whether a change		
is minor or major will be made by the Planning Director and the		
Planning Board Chair." (Section 213-11.F.)		
4. The following Driveway Opening Permit note: "Prior to the	X	
construction of a driveway serving a residential use, the owner(s) of the		
property must secure, in writing, all required permits for a driveway		
opening (i.e. "curb cut") from either the Town of Windham's		
Department of Public Works and/or the State of Maine Department of		
Fransportation, as necessary, and submit a copy of said permits as part		
of an application for any future building permit." (Section 213-11.F.)	-	
5. The following Foundation Drains note: "Buildings within the	X	
subdivision plan shall be constructed with provisions for either of the		
following:		
a. A positive free outlet foundation drain, whereby the footing		ľ
elevations should be set as established by the builder or engineer.		
ಯ ಜನವರ ಅರ್ಜಾಯ ಮರ್ಷದ ಮಾಡುವರು ಮಾಡುವ ಅವರು ಹಾಡುತ್ತವಾದ ಮಾಡುವವಾದ ಮತ್ತು. ಕ್ಷಮ್ ಕ್ರಾಮ್ ಹಾಡುತ್ತಾರೆ ಹಾಡು ಕ್ರಾಮ್ ಮಾಡುವ ಅವರ	1	

Approved		VIL_RESP02642
Amended	4	Major Subdivision Plan Final Plan

	Check when co	mpleted
	Applicant	Staff
sump hole, whereby the bottom of the footing elevation shall be at least		
twelve (12) inches above the limiting groundwater level as determined		ľ
by a licensed site evaluator and approved by the Town of Windham		
Code Enforcement Officer."		
(Section 213-11.F.)		<u> </u>
6. The following Alterations or Deviations From Final Plan note: "Major	X	
alterations or deviations must be approved by the Planning Board as		
revisions or amendments. The initial determination of whether a change		
is minor or major will be made by the Planning Director and the		
Planning Board Chair." (Section 213-11.G.)		
F. Additional Information Notes	v	
Any additional or general plan notes	X	
G. Street names and lines, pedestrian ways, lots, easements, and areas to	X	
be reserved for or dedicated to public use (Section 213-10.A.3.)	X	<u> </u>
H. Sufficient data to determine readily the location, bearing, and length of every street line, lot line, and boundary line, and to reproduce such	Α	
lines upon the ground. Parting lines of all lands adjoining the site shall		
be shown (Section 213-10.A.4.)		
I. The length of all straight lines, radii, length of curves and central	X	-
angles of all curves, tangent distances, and tangent bearing for each street	73	
(Section 213-10.A.5.)		
J. Lots within the subdivision, numbered as prescribed by the Planning	X	
Board (Section 213-10.A.6.)		
K. By proper designation, all public open space for which offers of	NA	
cession are made by the applicant and those spaces to which title is		
reserved by the applicant (Section 213-10.A.7.)]	
L. Location of permanent reference monuments to be constructed and	X	
placed upon final subdivision plan approval (Section 213-10.A.8.)		
M. Proposed landscaping program (Section 213-10.A.9.)	X	
IV. PUBLIC DEDICATIONS	4 2 2 2 2 3 3 5	
Attach, as an addendum to EXHIBIT 2, written offers of cession to the	NA	
Town of all public open space shown on the plan and copies of		
agreements or other documents showing the manner in which spaces, title		
to which is reserved by the applicant, are to be submitted (Section 213-		
10.B.).		4.54
V. DEVELOPMENT IMPACT FEES	37	
Attach, as EXHIBIT 26, an estimate of the amount of the required off-	X	
site municipal infrastructure impact fee, based on Section 140-38.G.2.,		
for roads and recreation and park areas VI. CONFORMANCE WITH SUBDIVISION GENERAL PURPOSE		
	X	
Attach, as EXHIBIT 27, a written description of how the proposed design	Λ	
and layout meets the general requirements (Section 213. Article VIII.), design standards (Section 213. Article IX.), and the following general		
purposes of subdivision ordinance (Section 213-1.AK.):	v	
A. Will not result in undue water or air pollution	X	
cr. 11th not 10out in anuly track of all pollution		

Approved		VIL_	_RESP02643
Amended	Ŝ	Major Subdivision Plan Final Plan	

	Check when completed	
	Applicant	Staff
B. Has sufficient water available for the reasonably foreseeable needs of the subdivision	X	
C. Will not cause and unreasonable burden on an existing water supply, if one is to be utilized	X	
D. Will not cause unreasonable soil erosion or reduction in the capacity of the land to hold water so that a dangerous or unhealthy condition may result	X	
E. Will not cause unreasonable highway, public road or private road congestion or unsafe conditions with respect to the use of highways, public roads existing or proposed	X	
F. Will provide for adequate solid and sewage waste disposal	X	
G. Will not cause an unreasonable burden on the ability of the Town to dispose of solid waste and sewage with respect to the use of municipal facilities existing or proposed	X	
H. Will not place an unreasonable burden on the ability of the Town to provide municipal or governmental services	X	
I. Will not have an undue adverse effect on the scenic or natural beauty of the area, aesthetics, historic sites or rare and irreplaceable natural areas	X	
J. Is in conformance with the Comprehensive Plan of the Town	X	
K. The applicant has adequate financial and technical capacity to meet the above standards	, X	
L. If situated, in whole or in part, within two hundred fifty (250) feet of any pond, lake, or river, will not adversely affect the quality of such body of water or unreasonably affect the shoreline of such body of water	X	

	For Planning Board Use Only
Required Third Party Review	
Legal Questions	
Anticipated Waivers	
Motion	
Action/Vote	
Date Conditions of Approval	
•	
Comments	Public Works Fire Police School Others

Exhibit 1 - Amendment

SOILS

Attached as Appendix A please find a copy of the Supplemental Geotechnical Investigation Report from Oak Engineers dated June 1, 2007. This report further refines the pre-loading requirements and deep foundation recommendations introduced in the previous Geotechnical report dated February 27, 2007. Please refer to Exhibit 1 of the Pre-application Submission for a copy of the previous geotechnical report.

Attached as Appendix B, please find additional information from Oak Engineering regarding the Slope Stability Analysis.

This additional pre-loading and slope stability information is also reflected in the revised planset. Please refer to the attached sheets C3.1 through C3.3.

Appendix A

Supplemental Geotechnical Investigation Report



ENGINEERS

Civil Engineers & Land Surveyors

June 1, 2007

Project 064006 BG 003

Lee D. Allen, P.E. Northeast Civil Solutions 153 U.S. Route 1 Scarborough, Maine 04074

RE:

Supplemental Geotechnical Investigation

Village at Little Falls, LLC

7 to 13 Depot Street South Windham, Maine

Dear Mr. Allen:

Oak Engineers, LLC (Oak) has completed supplemental geotechnical investigations of the above site in accordance with our proposal for additional geotechnical engineering services dated April 9, 2007, and subsequently authorized on April 19, 2007.

SCOPE OF ADDITIONAL INVESTIGATION

The purpose of these additional investigations is to further define and evaluate the effects of underlying soft organic clay deposits, which were discovered in our previous subsurface investigation and reported on February 27, 2007, on the proposed development. The primary objective is to refine recommendations for deep foundation and pre-loading requirements described in "Area 3" of the previous report.

Subsurface Exploration (Area 3)

Additional subsurface exploration methods consisted of soil test drilling. Eleven test borings (B201 through B211) were advanced with 2¼-inch inside diameter (i.d.) hollow-stem steel augers, at the approximate locations indicated on the attached plan included as Attachment A, to a maximum depth of 42 feet below the ground surface (bgs). Soil samples were obtained from each test boring with split-barrel spoon samplers at continuous and nominal 5-foot intervals as directed by Oak's geotechnical engineer. In general, continuous samples were obtained throughout the soft clay deposits. Standard penetration resistance tests were performed and recorded at each sampling interval in accordance with ASTM D 1586 procedures. At soil boring B208, a single undisturbed soil sample was extracted from the underlying soil layers using a thin-walled Shelby tube in according to ASTM D 1587 procedures. One 5-foot NQ rock core sample was collected from test boring B205, from approximately 17 feet to 22 feet bgs. Both the soil and rock samples were returned with the field drilling logs to Oak's office for further analysis and review.

www.oakengineers.com

Laboratory Testing

Soil samples were visually classified by a geotechnical engineer in general accordance with ASTM D 2487 Unified Soil Classification System (USCS) in Oak's office. The Shelby tube soil sample was transported to a certified soil testing firm's office (Geotesting Express, of Boxboro, Massachusetts) for laboratory analysis and testing. Laboratory testing included consolidated undrained (CU) triaxial compressive strength and vane shear testing. All testing was conducted in accordance with accepted ASTM procedures. Final soil boring logs were prepared by an engineer on the basis of visual classification of soil and rock core samples, laboratory test results, and field drilling logs and are included as Attachment B. A description of geotechnical terms and soil classifications are also included in Attachment B. Complete laboratory analysis and test results are included in Attachment C.

Geotechnical Evaluation

The geotechnical engineer evaluated subsurface conditions relative to the proposed development on the basis of field reconnaissance and subsurface exploration, project description, local geology, and laboratory analysis and testing in accordance with generally accepted geotechnical engineering principles and practices. According to our agreement, the geotechnical engineer evaluated subsurface conditions and provided modified recommendations for the following project elements:

- 1. Site preparation
- 2. Building foundations
- 3. Floor slabs
- 4. Construction quality control

SUBSURFACE CONDITIONS

Soil Test Borings

Apparent Subsurface Profiles depicting the proposed construction, existing topography, and interpreted soil profiles were revised and are shown on drawings C2.0 and C2.1 in Attachment A. For the purposes of this supplemental report and the related development, soil test boring results are generally described as follows:

1. Soil samples from supplemental test borings B201 through B211 consisted of fine to medium sand with lesser amounts of fine gravel and silt to approximately 5 to 15 feet bgs. Several samples contained one or more: concrete, coal ash, bricks and organic fibers within these sampling depths. Relative density of the soil samples generally varied from loose to firm. However, in test borings B203, B209, and B210 the soil samples were very loose to approximately 10 feet bgs.

- Very soft to soft bluish gray clay was recovered from test borings B204, B207, B208, B209, B210, and B211 and ranging in depths 15 to as deep as 38 feet bgs. Soil samples observed in test borings B201 and B202 at depths ranging from approximately 15 to 30 feet bgs were predominantly stiff mottled clay.
- 3. Test borings spoon or auger refusal was encountered in test borings B201, B202, B204, B207, and B209 and varied in depth from approximately 20 to 40 feet bgs. Test borings B203, B205, and B206 encountered refusal at depths varying from approximately 10 to 17 feet bgs.
- 4. Petroleum odors were noted in the soil samples obtained from test boring B202 from approximately 5 to 30 feet and in test boring B203 at approximately 10 feet bgs.

Rock Core Sampling Results

One rock core sample was collected in boring B205 from approximately 17 to 21 feet bgs. The recovered rock core sample comprised predominantly sandstone and quartz. The medium-gray rock was very hard, moderately fractured, with relatively thin bedding planes inclined at approximately 45 degrees. The rock core recovery ratio was near 100 percent.

A rock quality designation (RQD) was calculated for the retrieved bedrock core specimens. The RQD is used to assess the structural integrity of a rock mass and is defined as the cumulative length of rock core pieces longer than 10 centimeters (cm), divided by the total length of the core run. Based upon the bedrock core obtained in B205, the RQD value was 70 percent.

Ground Water

Damp to saturated soil samples were recovered throughout each of the borings. The soil samples were observed to be wet or saturated from approximately 10 feet bgs to boring termination in most test borings. Soil samples were wet or saturated at approximately 20 feet bgs to boring termination in test borings B202, B204, and B211.

Laboratory Test Results

Results of laboratory testing are summarized below, with supporting laboratory results included as Attachment C.

Table 2: Summary of Soils Consolidation and C-U Triaxial Test Results

Depth	Preconsolidation Pressure (P _c)	Compression Index (C _c)	Recompression Index (C,)	Initial Void Ratic (e _o)	Vane Shear Strength (S _u) remolded	Coefficient of Consolidation (C _v)
B208, 17–19 ft.	1,000 psf	0.538	0.0448	1.24	40 psf	2.0 x 10 ⁻⁴ in ² /sec

CONCLUSIONS AND RECOMMENDATIONS

The geotechnical engineer interpreted subsurface conditions with respect to the proposed construction on the basis of field exploration, laboratory analysis, and visual classification of soil samples within the designated Area 3 shown in Attachment A. Revised design parameters and construction recommendations are provided below according to an analysis of subsurface conditions disclosed by both the previous and this supplemental investigation and accepted geotechnical engineering principles.

In general, the additional investigations performed confirmed the need for deep pile foundations and preloading soils in a portion of the site. The areas requiring preload and deep foundations are depicted on drawing C3.0 in Attachment A. Due to the highly variable subsurface conditions, careful construction sequencing of the fill and settlement monitoring is recommended.

Subsurface Conditions

In general, the overburden soils consist of very loose to loose silty granular fill soils (SM, GM-SM) containing miscellaneous construction debris consisting of wood, concrete, bricks, coal, ash, and little to trace amounts organics varying in depths of approximately 5 to 20 feet bgs. These deposits overlie the native Presumpscot silty clay deposits which vary in depths from approximately 10 to as much as 40 feet bgs. The strength and compressibility generally decreases with increasing depth. The deep soft clay soils are considered to be of low to moderate strength and high compressibility.

Permanent ground water levels are anticipated to be well below the proposed excavation levels for building foundations and utilities on site. However, the proposed retaining wall adjacent to the on-site power plant will require foundations that extend below groundwater and the adjacent river and dewatering will be required for installation of foundations.

For the purposes of seismic design, the soil profile within the designated Area 3 of the property is *Site Class E* according to *Minimum Design Loads for Buildings and Other Structures* (ASCE 7-02) published by American Society of Civil Engineers (ASCE).

Site Preparation

Site preparation should commence by relocating underground utilities and demolishing all structures within the footprint of the proposed on-site construction. All existing underground utilities located

beneath the proposed foundations should be relocated to outside building perimeters. Underground structures beneath the proposed buildings or pavements should be removed to at least 2 feet below proposed foundation and pavement subgrade levels, and 2 feet below finished grades in landscaped areas. The basement area of the existing building should be filled to subgrade level. The surficial soils should then be stripped of all pavements, topsoil, and organics within the proposed building and pavements.

After clearing and stripping the site, subgrades beneath the proposed buildings, pavements, and fill areas should be proof-rolled with several passes of a 15-ton vibratory roller traveling at slow speeds in each perpendicular direction. All weak and unstable subgrades observed by pumping and weaving during proof-rolling or resulting in depressions greater than one-half of an inch after several passes of the roller should be undercut a minimum of 12 inches and backfilled. According to proposed site plans, significant amounts of fill will be required to increase the existing site grades to proposed subgrade level.

Settlement Analysis

Based on the results of this investigation, approximately 5 to 15 feet of fill (average ~ 10 feet) will be required to increase site grades beneath buildings, roads, and parking areas in the areas found to underlain by soft compressible clay and organic soils. Assuming that fill soils are placed in incremental lifts during a period of approximately one month, we estimate that long-term settlements on the order of 6 to 8 inches may occur due to consolidation of the underlying clay soils after completion of the fill. We estimate that these settlements may continue for approximately 6 to 8 months after completion of filling operations.

Pre-load and Settlement Monitoring

In order to accelerate the time to reach estimated total settlements beneath the required fill, we recommend that the areas overlying the soft clay and organics be filled with Structural Fill as previously specified and pre-loaded with additional thickness of fill materials. The proposed limits of pre-loaded area are designated on C3.0 of Attachment A. According to our analysis, the pre-loading program should consist of placing an additional six feet thick soil layer above the proposed finished subgrade levels in the designated areas. We anticipate that the additional pre-load will enable construction of building foundations, pavements and utilities within approximately 2 to 4 months after placement of the pre-load.

In order to minimize the cost of materials, we recommend that the pre-load material be reused as fill in other portions of the Site. Preloading will require a carefully monitored subgrade settlement survey program within the proposed pre-loaded area during and after construction of the fill in order to determine the actual rate of settlement and projected time for settlements to dissipate. The program should be conducted under the supervision of a geotechnical engineer licensed in Maine.

Underground utilities and final pavements within the pre-loaded area should be installed outside the building perimeters only after final site grade elevations are established and settlements have substantially dissipated. Detailed requirements for placement of fill and backfill are provided in the previous report.



Foundations

Due to the presence of miscellaneous construction debris, organics and possible large voids within the existing surficial fill soils, deep foundations are recommended for support of buildings designated on drawing C3.0 of Attachment A. Considering the subsurface conditions and feasible foundation alternatives, we believe the designated buildings should be supported on deep foundations extending to a the underlying sound bedrock, which may range from approximately 10 to 50 feet below proposed foundations. Drilled piers would most likely require permanent casing to maintain stable excavations during installation and are not recommended due to their relatively high associated costs.

Economically feasible deep foundation options considered for this site are driven timber, pre-cast concrete and steel piles. Timber piles are considered to be the most economical for this site given the anticipated foundation loads, depth of suitable bearing stratum, and subsurface conditions. Accordingly, Oak recommends that the designated buildings be supported on timber piles driven to refusal on sound bedrock. It should be noted that pre-drilling or spudding may be required to penetrate through subsurface obstructions if driving stresses exceed the recommended values stated below.

On the basis of our analysis of subsurface conditions and the proposed construction, the following foundation design recommendations are provided:

1.	Pile Section:	Timber, ASTM D25
2.	Species:	Southern Pine
3.	Preservative Treatment:	AWPA C3
4.	Maximum Driving Stress:	3,000 psi
5.	Maximum Design Capacity:	15 Tons/pile
6.	Maximum Effective Driving Energy:	18 Kip-Ft./blow (Single-acting hammer)
7.	Maximum Vertical Batter	1H:10V
8.	Minimum Pile Spacing	2.5 x pile diameter

Piles should be designed and installed according to Standard Guidelines for the Design and Installation of Pile Foundations (ASCE 20-96) published by ASCE. For the purposes of bidding, construction documents should require a base-bid pile length equal to 35 feet, and unit prices should be provided to adjust for the final in-place pile length. The final pile tip depth should be determined in the field by using an acceptable driving formula or through dynamic pile load testing methods according to ASTM D 4945 (CASE) corresponding to the above allowable load capacity including a factor of safety equal to 2.0. Protective pile tips should be used to prevent damage due to driving through fill, obstructions, or into bedrock.

Floor Slabs

In buildings designated for deep pile foundation support, we recommend that both the living area and garage floors be designed and constructed as fully supported on foundation grade beams and timber piles as recommended above. The remaining building floor slabs may be designed and constructed as slab on grade and specified in the previous geotechnical report.

Construction Quality Control

The geotechnical engineer should be provided the opportunity to review the final design and specifications to ensure recommendations presented herein have been properly interpreted and applied. It is recommended that all backfill and compaction be inspected and tested by a qualified firm to ascertain that the proper materials are placed and adequately compacted. The geotechnical engineer should review all soil inspection and testing reports and monitor site development and foundation subgrade preparation to determine the necessity for additional cut and backfill beneath building subgrades. The geotechnical engineer should also review the contractor's subgrade settlement survey and monitoring program during the placement of fill and, on the basis of this survey, determine the time-rate of settlement and recommended sequence for installation of structures, utilities, and pavements in Area 3.

CLOSURE

This report has been prepared to assist the Site and structural engineers in the design and construction of foundations, pavements, and Site structures related to the proposed development at 7 to 13 Depot Street, South Windham, Maine. The recommendations have been presented on the basis of an understanding of the project as described herein, and through the application of generally accepted foundation engineering practices. No other warranties, expressed or implied, are made.

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We have enjoyed working with you on this phase of your project. Should you have any questions regarding this report or require additional assistance, please do not hesitate to call.

Sincerely,

OAK ENGINEERS, LLC.

Diane Gagnon Project Engineer

Paul D. DeStefano, Ph.D., P.E. Director, Geotechnical and Structural Services

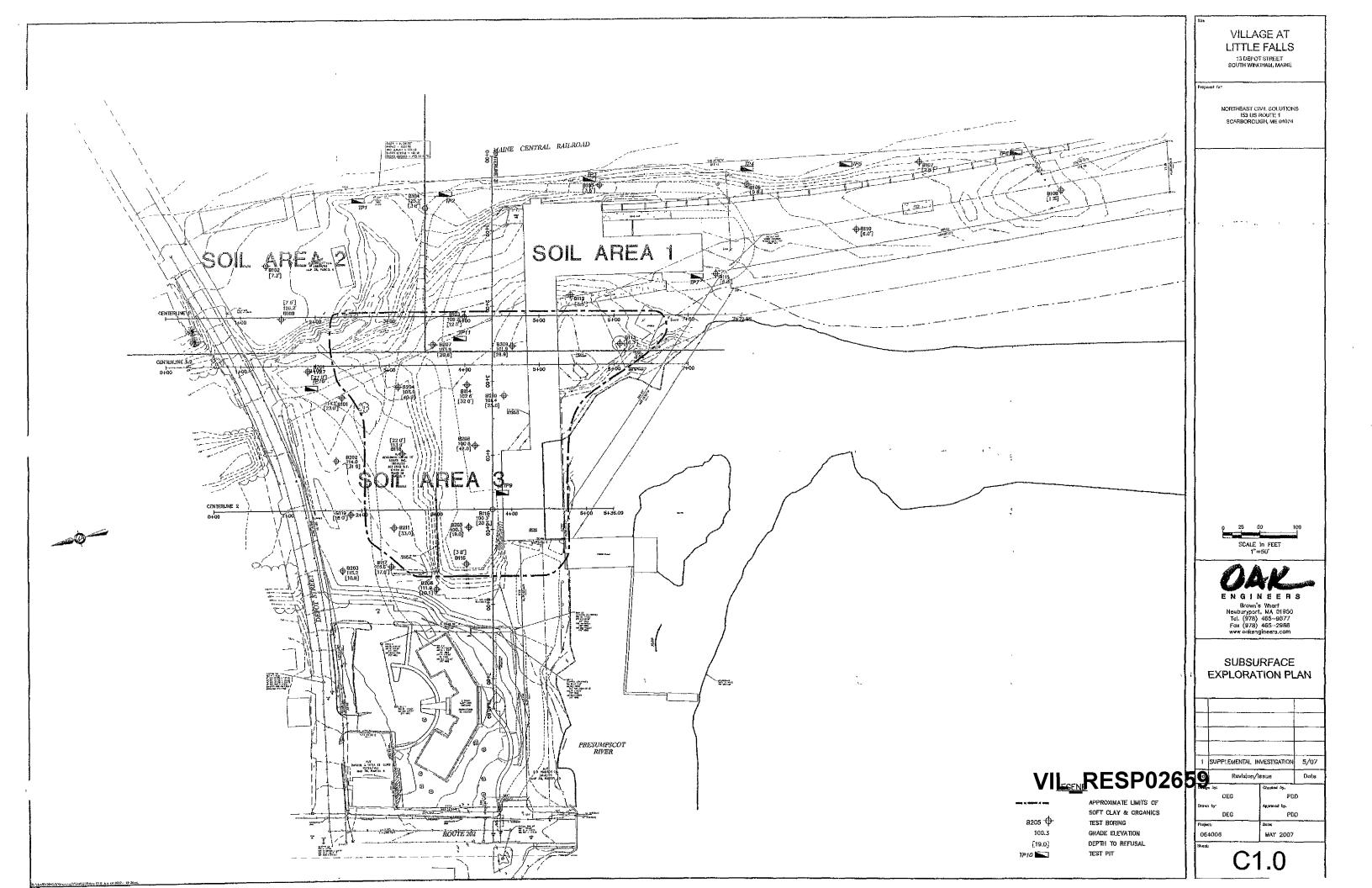
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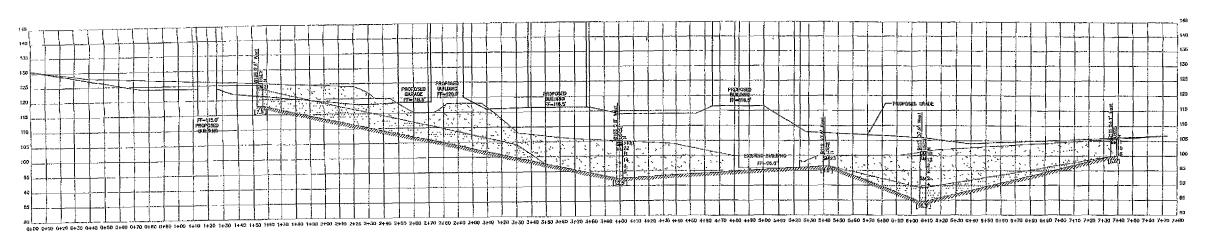
ce: Steve Etzel, Questor, Inc.

ATTACHMENT A

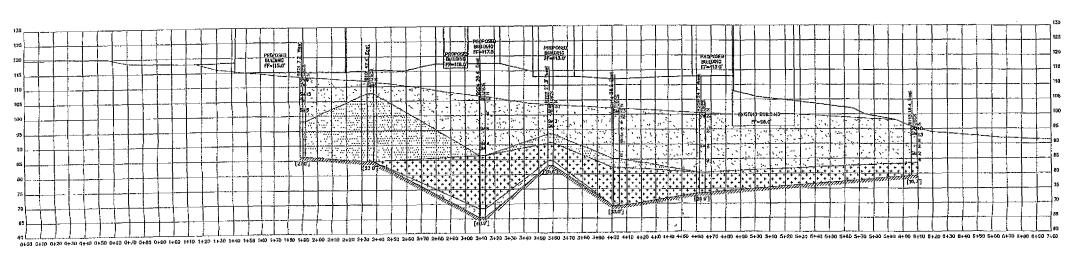
Figures

Supplemental Geotechnical Investigation Village at Little Falls, LLC 7 to 13 Depot Street South Windham, Maine





PROFILE 1



PROFILE 1.2 (REVISED MAY 2007)





APPARENT BEDROCK



SILTY SAND OR GRANUAR FILL



STANDARD PENETRATION VALUE

UNIFIED SOIL CLASSIFICATION (ASTM D-2487)

VILLAGE AT LITTLE FALLS 13 DEPOT STREET SOUTH WINDHAM, MAINE

NORTHEAST CIVIL SOLUTIONS 153 US ROUTE 1 SCARBOROUGH, ME 04074

VERTICAL SCALE SCALE in FEET 1"=60'

SCALE in FEET 1"=30"

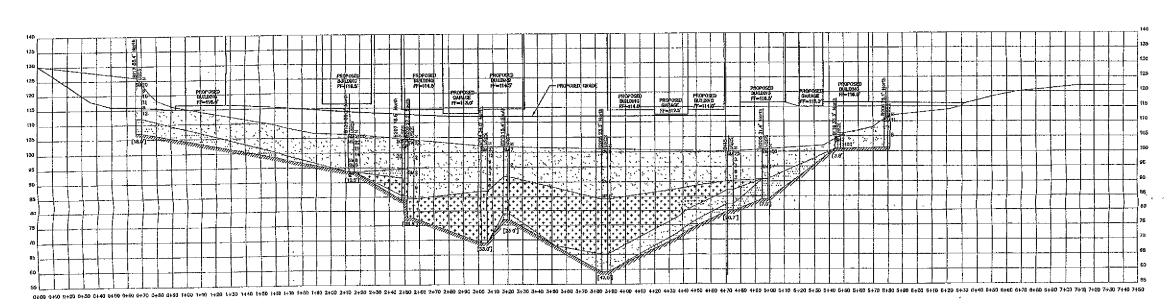


Brown's Wharf Newburyport, MA 01950 Tel. (978) 465~9877 Fax (978) 465—2986 www.eakengineers.com

APPARENT SUBSURFACE PROFILES:

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Project:		Date:	
กล	4008	MAY 2007	

PROFILE 2 (REVISED MAY 2007)



PROFILE 3 (REVISED MAY 2007)

LEGEND

APPARENT BEDROCK



SILTY SAND OR GRANULAR FILL



MEDIUM TO ST CLAY/SILT



ORGANICS/SOFT MARINE CLAY

n standard penetration value

> UNIFIED SOIL CLASSIFICATION (ASTM D-2487)

> > Comment of the Original

VERTICAL SCALE
0 30 60 120
SCALE IN FEET
1"=60'

VILLAGE AT LITTLE FALLS 13 DEPOT STREET SOUTH WINDHAM, MAINE

NORTHEAST CIVIL SOLUTIONS 153 99 ROUTE 1 SCARBOROUGH, ME 04074

HORIZONTAL SCALE

15 30 5

SCALE in FEET

1"=30"



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APPARENT SUBSURFACE PROFILES

7+30 7+40 7+59

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1 SUPPLEMENTAL INVESTIGATION 5/07

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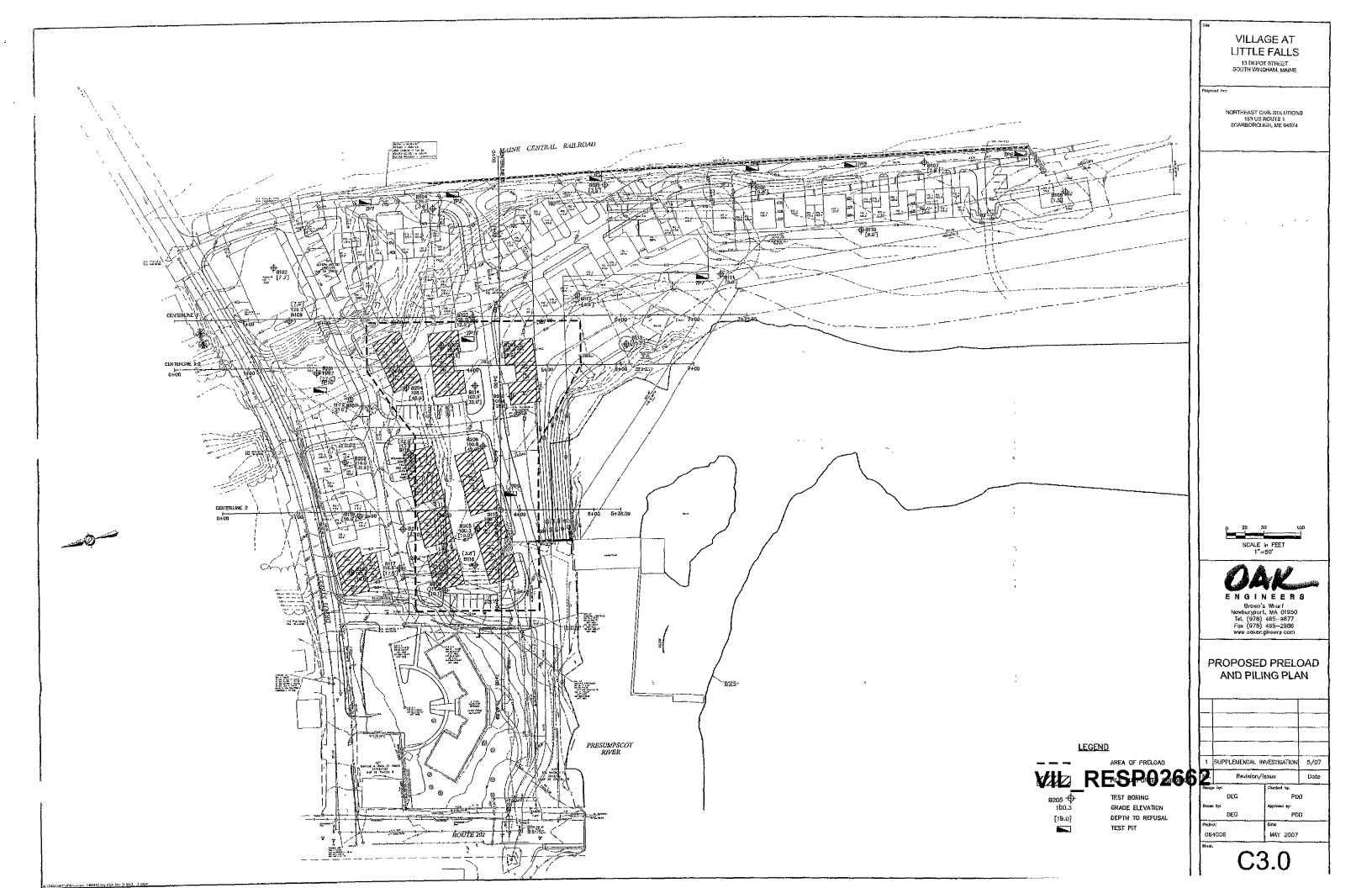
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ATTACHMENT B

Soil Boring Logs

Supplemental Geotechnical Investigation Village at Little Falls, LLC 7 to 13 Depot Street South Windham, Maine